ORDER NO. TSD8207007C2

Service Manual

Stereo Music System

FM/MW/LW/FM STEREO RADIO WITH CASSETTE TAPE DECK AND RECORD PLAYER

SG-V03 (L)

SPECIFICATIONS

AMPLIFIER SECTION

Power Output . . . . . .MPO 6W x 2 (THD 5%, 8 Ω)
RMS 4W x 2 (THD 5%, 8 Ω)
One channel driven
3.4W x 2 (THD 5%, 8 Ω)
Both channels driven

Input Sensitivity & Impedance:
Mic . . . . . .1.5 mV, 15kΩ
Tone Control . . . . . .+4 dB, –15 dB, at 10 kHz

FM TUNER SECTION

Frequency Range . . . . . .87.5 MHz ~ 108 MHz
Intermediate Frequency (IF) . . . . . .10.7 MHz
Sensitivity . . . . . .6μV (S/N 26 dB mod. 40 kHz) (DIN) at 75 Ω
Image Ratio . . . . . .40 dB (98 MHz)
Signal/Noise Ratio . . . . . .54 dB (at 1 kHz, 60 dB, 40 kHz)
Distortion . . . . . .MONO; 0.3% (at 1 kHz, 60 dB 40 kHz)
STEREO; 0.5% (at 1kHz, 60 dB, 40 kHz)
Stereo Separation . . . . . .40 dB (at 1 kHz, 60 dB, 40 kHz)

AM TUNER SECTION

Frequency Range . . . . . .MW; 525 kHz ~ 1605 kHz (571 m ~ 187 m)
LW; 150 kHz ~ 350 kHz (2,000 m ~ 857 m)
Intermediate Frequency (IF) . . . . . .455 kHz
470 kHz (United Kingdom)
Sensitivity . . . . . .MW; 200μV/m (1 MHz)
LW; 500μV/m (350 kHz)
Image Ratio . . . . . .MW; 35 dB (1 MHz)
LW; 60 dB (350 kHz)

TAPE DECK SECTION

Track System 4-Track, 2-Channel
Recording System . . . . . .AC Bias (60 kHz)
Erasing System . . . . . .AC Erase (60 kHz)
Tape Speed . . . . . .4.75 cm/sec. (1.7/8 i.p.s.)
Frequency Response . . . . . .40 Hz ~ 10 kHz
Signal/Noise Ratio . . . . . .40 dB (DIN)
Wow & Flutter . . . . . .0.2% (WRMS)

PHONO SECTION

Turntable System . . . . . .Belt-drive, Fully Automatic Turntable Auto start/Auto lead-in, Auto-return
Turntable Platter . . . . . .28 cm (11")
Turntable Speed . . . . . .33-1/3 rpm and 45 rpm
Phono-Motor . . . . . .Electro-Governor DC Motor
Cartridge . . . . . .Ceramic cartridge (EPC-13STH)
Stylus . . . . . .Sapphire tip (EPS-41ST)
Stylus Pressure Range . . . . .6 ± 1 g

POWER CONSUMPTION . . .28W

POWER SUPPLY . . . . . .AC220V, or AC 110V/120V/220V/240V, 50/60 Hz

DIMENSIONS (W x H x D) . . . . . .450 x 125 x 403 mm

WEIGHT . . . . . 4.9 kg

*Specifications are subject to change without notice for further improvement.

Panasonic

Matsushita Electric Trading Co., Ltd.
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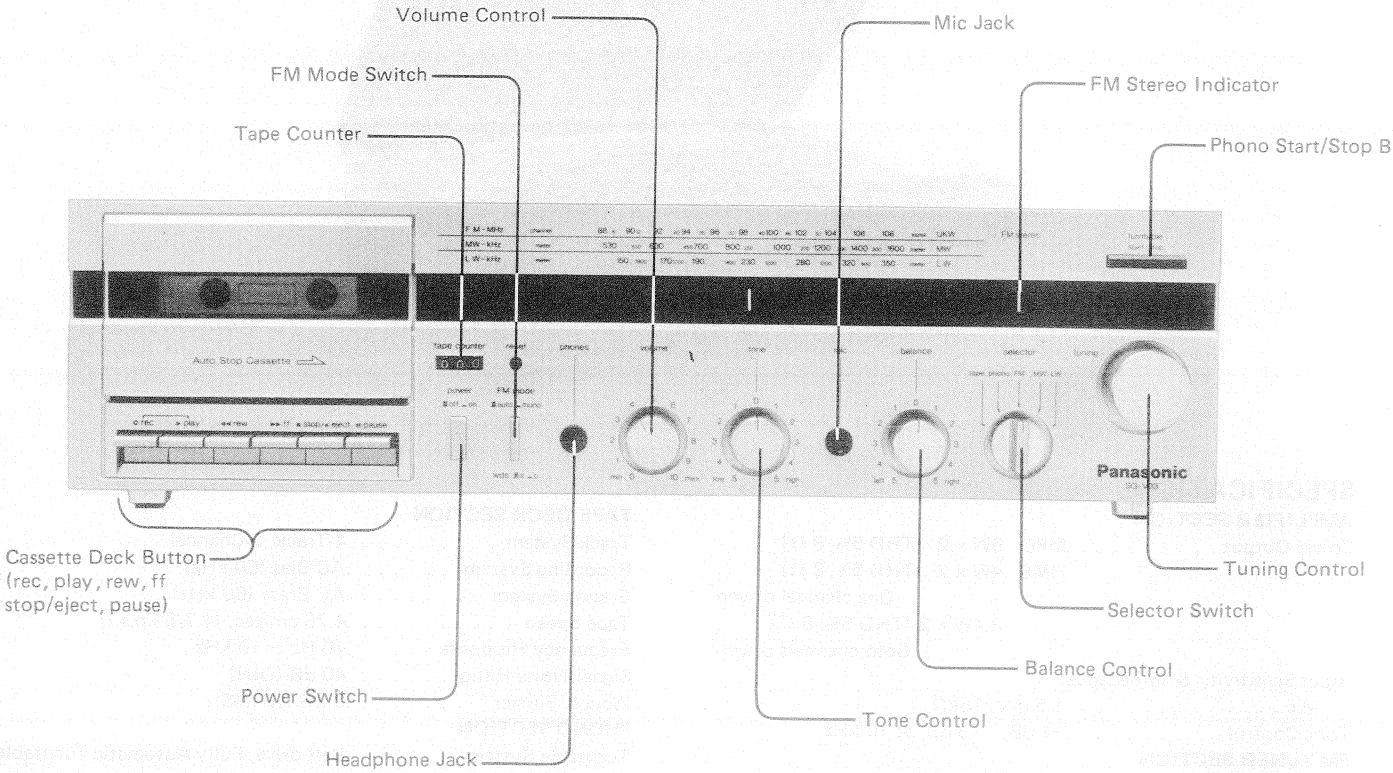
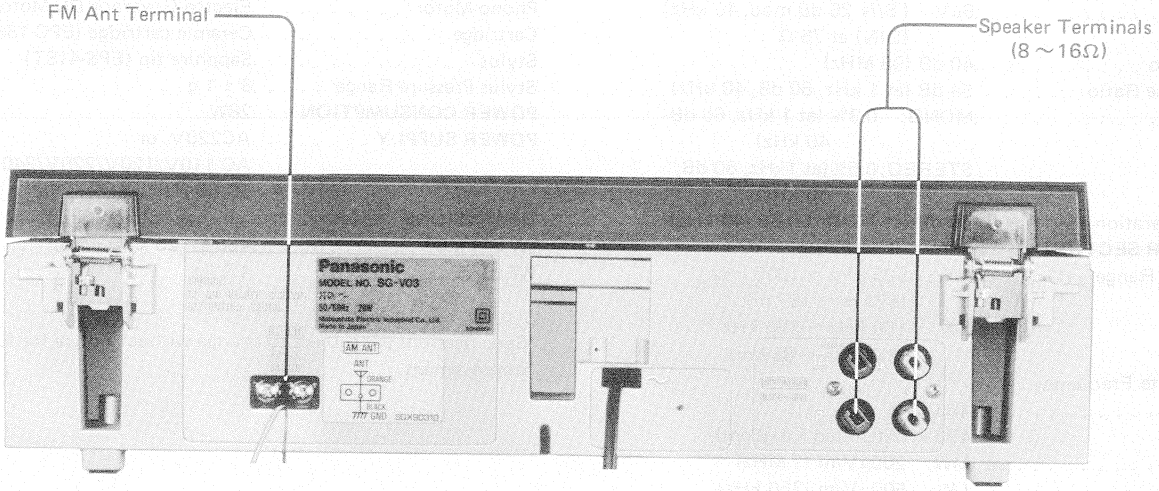
LOCATION OF CONTROLS





TECHNISCHE DATEN

VERSTÄRKER

Ausgangsleistung
- Musiki . . . . . .2 x 6W an 8 Ω (5% Klirr)
- Sinus . . . . . .2 x 4W an 8 Ω (5% Klirr) bei Aussteuerung eines Kanals; 2 x 3,4W an 8 Ω (5% Klirr) bei Aussteuerung beider Kanale

Eingangsempfindlichkeit und impedanz:
- Mikrofon . . . . . .1,5 mV, 15kΩ

Klangregler . . . . . .+ 4 dB, −15 dB bei 10 kHz

UKW-EMPFANGSTEIL

Empfangsbereich . . . . . .87,5 ~ 108 MHz
Zwischenfrequenz (ZF) . . . .10,7 MHz
Eingangsempfindlichkeit . . .6μV (Fremdspannungsabstand 26 dB, Hub 40 kHz) (DIN) bei 75 Ω
Spiegelfrequenzdämpfung . . .40 dB (98 MHz)
Fremdspannungsabstand . . .54 dB (bei 1 kHz, 60 dB, 40 kHz)
Klirrfaktor . . . . . .Mono; 0,3% (bei 1 kHz, 60 dB, 40 kHz)
Stereo; 0,5% (bei 1 kHz, 60 dB, 40 kHz)
Übersprechdämpfung . . . .40 dB (bei 1 kHz, 60 dB, 40 kHz)

AM-EMPFANGSTEIL

Empfangsbereiche . . . . . .MW; 525 ~ 1605 kHz (571 ~ 187 m)
LW; 150 ~ 350 kHz (2,000 ~ 857 m)

Zwischenfrequenz (ZF) . . . . . .455 kHz
Empfindlichkeit . . . . . .MW; 200μV/m (1 MHz)
LW; 500μV/m (350 kHz)
Spiegelfrequenzdämpfung . . .MW; 35 dB (1 MHz)
LW; 60 dB (350 kHz)

CASSETTEN-TONBANDGERÄT

Spursystem . . . . . .Viertelspur, Stereo
Aufnahmesystem . . . . . .HF-Vormagnetierung (60 kHz)
Löschsystem . . . . . .HF-Löschung (60 kHz)
Bandgeschwindigkeit . . . . .4,75 cm/s
Frequenzgang . . . . . .40 ~ 10.000 Hz
Fremdspannungsabstand . . .40 dB (DIN)
Gleichlaufschwankungen . . .0,2% (Mittelwert, bewerret)

PHONO

Plattenspielersystem . . . . .Riemenantrieb, Automatischer Plattenspieler Auto-Start/Automatisches Einsetzen in die Einlaufrille
Plattenteller . . . . . .28 cm (11")
Plattentellerdrehzahl . . . . .33 1/3 U/min. und 45 U/min.
Phono-Motor . . . . . .Electronisch geregelter Gleichstrom-motor
Tonabnehmer . . . . . .Ceramic-Tonabnehmer (EPC-13STH)
Abtastdiamant . . . . . .Saphir-Spitze (EPS-41ST)
Auflagekraftbereich des Abtastdiamanten . . . . .6 ± 1 g

LEISTUNGSAUFNAHME . .28W

NETZSPANNUNG UND -FREQUENZ . . . . . .220V oder 110/120/220/240V, 50/60 Hz

ABMESSUNGEN (B x H x T) . . . . . .450 x 125 x 403 mm

GEWICHT . . . . . .4,9 kg

* Änderungen der technischen Daten im Sinne der Weiteren Verbesserung jederzeit vorbehalten.

ANWEISUNGEN ZUM ABGLEICH-1

■ **AM-Abgleich**

Hinweise:
1. Lautstärkeregler . . . . . .Mittelstellung (MW/LW-ZF und HF, UKW-ZF); ganz zurückgedreht (UKW-ZF)
2. Klangregler . . . . . .Mittelstellung
3. Höhneregler . . . . . .Mittelstellung
4. Balanceregler . . . . . .Mittelstellung
5. Funktionswahlschalter . . . . . .MW, LW, FM
6. Netzschalter . . . . . .ON
7. Der Ausgang des Meßsenders sollte nur so hoch sein, daß dieser angezeigt wird.
8. Beim Abgleich darauf achten, daß die Lautsprecherboxen an den Receiver angeschlossen sind (oder Ersatzlastwiderstände mit 8 Ω verwenden).

SCHRITT	MESSOSZILLATOR oder WOBBELGENERATOR		EINSTELLUNG DER ABSTIMM-SKALA	ANZEIGE-INSTRUMENT	EINSTELLEN	BEMERKUNGEN
	ANSCHLUSS	FREQUENZ				
1 (MW)	Eine Schleife aus mehreren Drahtwindungen bilden, und das Signal der Schleife des Empfängers zuleiten	455 kHz, 30% Modulation bei 400 Hz	Punkt ohne Störung	Ausgangsleist-ungsmesser über die linke (L) Lautsprecherklemme	T201 (MW/LW-ZF)	Auf maximalen Ausgang einstellen.
2 (MW)		511 kHz, 30% Modulation bei 400 Hz	511 kHz		L206 (MW-OSZILLATOR) L203 (MW-ANTENNE)	Auf maximalen Ausgang einstellen.
3 (MW)		1650 kHz 30% Modu-lation bei 400 Hz	1650 kHz		CT203 (MW-OSZILLATOR-TRIMMER) CT201 (MW-ANTENNEN-TRIMMER)	Auf maximalen Austang einstellen. Die Schritte (2) und (3) wiederholen.
4 (MW)		142 kHz, 30% Modu-lation bei 400 Hz	142 kHz		L207 (LW-OSZILLATOR) L204 (LW-ANTENNE)	Auf maximalen Ausgang einstellen
5 (MW)		360 kHz 30% Modu-lation bei 400 Hz	360 kHz		CT204 (LW-OSZI-LLATORTRIMMER) CT-202 (LW-ANTEN NENTRIMMER)	Auf maximalen Ausgang einstellen. Die Schritte (2) und (3) wiederholen.
FM-IF-ABGLEICH						
1	Obrer Bereich über 5 pF zu den Me-punkten TP101 (IC101) und TPE (Erde).	10,7 MHz (400 kHz Hub)	Punkt ohne Störung	Den Vertikalamplitu-deneingang des Oszilloskops mit den Meßpunkten TP201 und TP202 (Erde) verbinden.	T101 (UKW-ZF)	• Auf maximale Amplitude und symmetrische Kurve einstellen. • **Siehe Anmerkung.**
2					T203 (UKW-Disc.)	Auf maximale Amplitude und richtige Linerität zwischen den Marken von ungefähr ± 100 kHz einstellen
Bemerkung: Vor Ausführung des Schrittes 1 die Kerne des T203 ganz gegen den Uhrzeigersinn drehen.						
FM-RF-ABGLEICH						
1	Über eine künstliche Antenne (75 Ohm) an die UKW-Außen-antennenklemme (EXT. FM) anschließen.	87,0 MHz, 30% Modulation bei 400 Hz	87.0 MHz	Ausgangsleistung-smesser über die linke (L) Laut-sprecherklemme	L104 (UKW-OS ZILLATORSPULE) L103 UKW-ANTENNEN-SPULE)	Auf maximalen Ausgang einstellen.
2		108,5 MHz, 30% Modulation bei 400 Hz	108.5 MHz		CT102 (UKW-OS-ZILLATOR-TRIMMER) CT101 (UKW-AN-TENNEN-TRIMMER)	Auf maximalen Ausgang einstellen. Die Schritte (1) und (2) wiederholen.

Bemerkungs: 1. Da drei Ausgangsanzeigen vorliegen, müssen die Enstellungen bei Mittenfrequenz durchgeführt werden.
2. Um Abgleiten der FM-Skala (87,5 oder 108 MHz) zu korrigieren, die Spule L104 und den Trimmer CT102 miteinander abstimmen.

ANWEISUNGEN ZUM ABGLEICH-1

■ **AM-Abgleich**

Hinweise:
1. Lautstärkeregler . . . . . Mittelstellung (MW/LW-ZF und HF, UKW-ZF); ganz zurückgedreht (UKW-ZF)
2. Klangregler . . . . . Mittelstellung
3. Höhneregler . . . . . Mittelstellung
4. Balanceregler . . . . . Mittelstellung
5. Funktionswahlschalter . . . . . MW, LW, FM
6. Netzschalter . . . . . ON
7. Der Ausgang des Meßsenders sollte nur so hoch sein, daß dieser angezeigt wird.
8. Beim Abgleich darauf achten, daß die Lautsprecherboxen an den Receiver angeschlossen sind (oder Ersatzlastwiderstände mit 8 Ω verwenden).

SCHRITT	MESSOSZILLATOR oder WOBBELGENERATOR		EINSTELLUNG DER ABSTIMM-SKALA	ANZEIGE-INSTRUMENT	EINSTELLEN	BEMERKUNGEN
	ANSCHLUSS	FREQUENZ				
1 (MW)	Eine Schleife aus mehreren Drahtwindungen bilden, und das Signal der Schleife des Empfängers zuleiten	455 kHz, 30% Modulation bei 400 Hz	Punkt ohne Störung	Ausgangsleistungsmesser über die linke (L) Lautsprecherklemme	T201 (MW/LW-ZF)	Auf maximalen Ausgang einstellen.
2 (MW)		511 kHz, 30% Modulation bei 400 Hz	511 kHz		L206 (MW-OSZILLATOR) L203 (MW-ANTENNE)	Auf maximalen Ausgang einstellen.
3 (MW)		1650 kHz 30% Modulation bei 400 Hz	1650 kHz		CT203 (MW-OSZILLATOR-TRIMMER) CT201 (MW-ANTENNEN-TRIMMER)	Auf maximalen Austang einstellen. Die Schritte (2) und (3) wiederholen.
4 (MW)		142 kHz, 30% Modulation bei 400 Hz	142 kHz		L207 (LW-OSZILLATOR) L204 (LW-ANTENNE)	Auf maximalen Ausgang einstellen
5 (MW)		360 kHz 30% Modulation bei 400 Hz	360 kHz		CT204 (LW-OSZILLATORTRIMMER) CT-202 (LW-ANTENNENTRIMMER)	Auf maximalen Ausgang einstellen. Die Schritte (2) und (3) wiederholen.
FM-IF-ABGLEICH						
1	Obrer Bereich über 5 pF zu den Me-punkten TP101 (IC101) und TPE (Erde).	10,7 MHz (400 kHz Hub)	Punkt ohne Störung	Den Vertikalamplitudeneingang des Oszilloskops mit den Meßpunkten TP201 und TP202 (Erde) verbinden.	T101 (UKW-ZF)	• Auf maximale Amplitude und symmetrische Kurve einstellen. • **Siehe Anmerkung.**
2					T203 (UKW-Disc.)	Auf maximale Amplitude und richtige Linerität zwischen den Marken von ungefähr ± 100 kHz einstellen
Bemerkung: Vor Ausführung des Schrittes 1 die Kerne des T203 ganz gegen den Uhrzeigersinn drehen.						
FM-RF-ABGLEICH						
1	Über eine künstliche Antenne (75 Ohm) an die UKW-Außenantennenklemme (EXT. FM) anschließen.	87.0 MHz, 30% Modulation bei 400 Hz	87.0 MHz	Ausgangsleistungsmesser über die linke (L) Lautsprecherklemme	L104 (UKW-OSZILLATORSPULE) L103 UKW-ANTENNENSPULE)	Auf maximalen Ausgang einstellen.
2		108,5 MHz, 30% Modulation bei 400 Hz	108.5 MHz		CT102 (UKW-OSZILLATOR-TRIMMER) CT101 (UKW-ANTENNEN-TRIMMER)	Auf maximalen Ausgang einstellen. Die Schritte (1) und (2) wiederholen.

Bemerkungs: 1. Da drei Ausgangsanzeigen vorliegen, müssen die Enstellungen bei Mittenfrequenz durchgeführt werden.
2. Um Abgleiten der FM-Skala (87,5 oder 108 MHz) zu korrigieren, die Spule L104 und den Trimmer CT102 miteinander abstimmen.

ANWEISUNGEN ZUM ABGLEICH-2

■ **UKW-Stereoabgleich**

Einstellungen: Lautstärkeregler . . . . . Lautsprecher-Hörlautstärke
Klangregler . . . . . Mittenstellung
Funktionswahlschalter . . . . . FM
Balanceregler . . . . . Mittenstellung
UKW-Empfangsweiseschalter . . . . . AUTO

GERÄTENSCHLUSS	EINSTELLEN	BEMERKUNGEN
Den Frequenzzähler an TP301 und TPE (Masse) bei 98 MHz anschließen; ohne Modulation bei 60 dB Eingang (Mono-Signal).	VR301	VR301 so einstellen, daß der Frequenzzähler 19,00 kHz ±100 Hz anzeigt.

■ **Kassettenbandgerct-Abgleich**

NULLABGLEICHUNG-ABGLEICH

Kontroll-Einstellungen: 1. Funktionswahlschalter . . . . . Tape
2. Kassettenbandgerät-Betriebsart . . . . . Aufnahme-Betriebstart

SCHRITT	ABGLEICH-OBJEKT	ROHRENVOLTMETER (RVM)-ANSCHLUSS		WDS	EINSTELLEN	BEMERKUNGEN
		POSITIV	NEGATIV			
1	Vormagnetisierungsstrom für Aufnahme	TP402	TP401	B	VR801	• VR801 so einstellen, daß das Röhrenvoltmeter 3.7 ± 0.1 mV anzeigt.
2	Vormagnetisierungsstrom für Löschung	TP802	TP801	B	.....	• Das Voltspannung muß 50 ~ 80 mV betragen.

AZIMUTH, ABGLEICH

Stellungen der Bedienungselemente: 1. Funktionswahlschalter . . . . . Tape
2. Kassettenbandgerät-Betriebsart . . . . Widergabe-Betribsart

SCHRITT	ABGLEICH-OBJEKT	ROHRENVOLTMETER (RVM)-ANSCHLUSS		TESTBAND-PEGEL	EINSTEL-LEN	BEMERKUNGEN
		POSITIV	NEGATIV			
1	Aufnahme-/Wiedergabekopfazimut	Lautsprecherklemme	Lautsprecherklemme	10 kHz, -5 dB	Kopfschraube	• Die Schraube so einstellen, daß das Röhrenvoltmeter den Höchstwert anzeigt.

CARACTÉRSTIQUES

SECTION AMPLIFICATEUR

Puissance de sortie . . . . . .6W x 2(DHT 5%, 8Ω) PSM.
4W x 2 (DHT 5%, 8Ω)EFF.
Un canal en fonction
3,4W x 2 (DHT 5%, 8Ω) EFF.
Deux canaux en fonction

Impédance et sensibilité d'entrée
Micro . . . . . .1,5 mV, 15 k Ω

Réglages de tonalité . . . . . .+ 4 dB, −15 dB â 10 kHz

SECTION TUNER FM

Echelle de fréquence . . . . . .87,5 MHz ~ 108 MHz

Fréquence intermédiaire
(FI) . . . . . .10,7 MHz

Sensibilité . . . . . .6μV (S/B 26 dB mod. 40 kHz) (DIN) à 75 Ω

Rapport d'image . . . . . .40 dB (98 MHz)

Rapport signal/bruit . . . . . .54 dB (à 1 kHz, 60 dB, 40 kHz)

Distorsion . . . . . .MONO: 0,3%(à 1 kHz, 60 dB, 40 kHz)
STÉRÉO: 0,5%(à 1 kHz, 60 dB, 40 kHz)

Séparation stéréo . . . . . .40 dB (à 1 kHz, 60 dB, 40 kHz)

SECTION TUNER AM

Echelle de fréquence . . . . . .PO: 525 kHz ~ 1605 kHz (571 m ~ 187 m)
GO: 150 kHz ~ 350 kHz (2000 m ~ 857 m)

Fréquence intermédiaire
(FI) . . . . . .455 kHz

Sensibilité . . . . . .PO: 200μV/m (1 MHz)
GO: 500μV/m (350 kHz)

Rapport image . . . . . .PO: 35 dB (1 MHz)
GO: 60 dB (350 kHz)

SECTION MAGNETOPHONE

Système de piste . . . . . .4 pistes, 2 canaux

Système d'enregistrement . . .Polarisation Cour. Alt. (60 kHz)

Système d'effacement . . . . .Effacement Cour. Alt (60 kHz)

Vitesse de band . . . . . .4,75 cm/s

Réponse de fréquence . . . . .40 Hz ~ 10 kHz

Rapport signal/bruit . . . . . .40 dB (DIN)

Pleurage et scintillement . . . .0,2 % (valeur eff pondérée)

SECTION TOURNE-DISQUE

Système . . . . . .Tourne-disque automatique à entrainement par couroie Marche automatique/amorce automatique, Retour automatique

Plateau . . . . . .28 cm (11")

Vistesse de rotation . . . . . .33-1/3 et 45 t/mn.

Moteur phono . . . . . .Moteur Cour. Cont. à régulateur électronique

Cellulle phonoelectrice . . . .Ceramic (EPC-13STH)

Point de lecture . . . . .Saphir (EPS-41ST)

Plage de force d'appui . . . . .6 ± 1g

CONSOMMATION DE PUISSANCE 28W

ALIMENTATION . . . . . .COUR.ALT. 220V ou 110V, 120V, 220V, 240V, 50/60 Hz

DIMENSIONS (L x H x P) . . . . . .450 x 125 x 403 mm

POIDS . . . . . .4,9 kg

* Les caractéristiques techniques sont sujettes à modification sans préavis et pour des raisons d'amélioration.

INSTRUCTIONS D' ALIGNMENT-1

■ **Alignment de AM**

Position des commandes:

1. Réglage de volume . . . . . Position centrale (AM-IF et RF, FM-RF);Minimum (FM-IF)
2. Réglage de tonalité . . . . . Position centrale
3. Contacteur de mode FM . . . . . AUTO et MONO
4. Réglage de balance . . . . . Position centrale
5. Sélecteur de mode . . . . . MW, LW, FM
6. Interrupteur général . . . . . ON
7. La sortie du générateur de signaux ne doit pas être plus élevée que nécessaire pour obtenir une indication de sortie.
8. S'assurer que l'enceinte acoustique est raccordée à l'ampli-tuner au moment d'effectuer l'alignement (ou utiliser des resistances de charge fictive de 8 Ω)

ETAPE	GÉNÉRATEUR DE SIGNAUX OU GÉNÉRATEUR DE BALAYAGE		POSITION DU CURSEUR SUR LE CADRAN	VOLTMETRE ou OSCILLOSCOPE	AJUSTER	REMARQUES
	CONNEXION	FREQUENCE				
ALIGNMENT DE F.I.ET H.F. EN AM						
1 (MW)	Former une boucle de plusieurs tours de cable et faire rayonner le signal par la boucle de l'ampli-tuner	455 kHz à à 30% modul. 400 Hz	Point de non interférence	Voltmètre sur la prise du haut-parleur gauche (L).	T201 (AM IF)	Ajuster pour obtenir un niveau de sortie maximum
2 (MW)		511 kHz à à 30% modul. à 400 Hz	511 kHz		L206 (MW OSC) L203 (MW ANT)	Ajuster pour obtenir un niveau de sortie maximum
3 (MW)		1650 kHz à 30% modul. à 400 Hz	1650 kHz		CT203 (Trimmer MW OSC) CT201 (Trimmer MW ANT)	Ajuster pour obtenir un niveau de sortie maximum. Répéter les opérations (2) et (3).
4 (LW)		142 kHz à 30% modul. à 400 Hz	142 kHz		L207 (LW OSC) L204 (LW ANT)	Ajuster pour obtenir un niveau de sortie maximum.
5 (LW)		360 kHz à 30% modul. à 400 Hz	360 kHz		CT204 (Trimmer LW OSC) CT202 (Trimmer LW ANT)	Ajuster pour obtenir un niveau de sortie maximum. Répéter les opérations (2) et (3).
ALIGNEMENT FM-IF						
1	Position haute par 5 pF à TP101 (IC101) et TPE (masse).	10,7 MHz (400 kHz SWP).	Point de non interférence	Connecter l'entrée de l'amplif.vert de l'oscilloscope à TP201 et TP202 (masse).	T101 (FM IF)	• Ajuster pour que l'amplitude soit maximale et la courbe symétrique. • **Se référer à la remarque**
2					T203 (disque FM)	• Ajuster pour que l'amplitude soit maximale et linéarité appropriée entre des mesures d'environ ±100kHz
Remarque: **Avant de procéder à l'alignement dans étape 1, tourner les noyaux de T203 à found dans le sens contraire des aiguilles d'une montre.**						
ALIGNEMENT FM-RF						
1	Raccorder la borne d'antenne EXT. FM par l'intermédiaire d'une antenne fictive. (75 ohms).	87,0 MHz à 30% modul. à 400 Hz.	87,0 MHz	Voltmètre sur la prise du haut-parleur gauche (L).	L104 (Bobine FM OSC) L103 (Bobine FM ANT)	Ajuster pour obtenir un niveau de sortie maximum.
2		108,5 MHz à 30% modul. à 400 Hz.	108,5 MHz		CT102 (Trimmer FM OSC) CT101 (Trimmer FM ANT)	Ajuster pour obtenir un niveau de sortie maximum. Répéter les opérations (1) et (2).
Remarques: **1. Comme on aura trois lectures de sortie présentes, les réglages doivent être faits à la fréquence centrale.** **2. Pour corriger la dérive sur l'échelle d'accord FM (87,5 ou 108 MHz), régler la bobine L104 et le condensateur d'antenne CT102 l'un avec l'autre.**						

■ Alignme

Positio	
Raccorder (entrée 60	

■ Alignme

Position de	
ETAPE	
1	
2	
Position	
ETAPE	
1	

INSTRUCTIONS D' ALIGNMENT-1

■ **Alignment de AM**

Position des commandes:
1. Réglage de volume . . . . . Position centrale (AM-IF et RF, FM-RF);Minimum (FM-IF)
2. Réglage de tonalité . . . . . Position centrale
3. Contacteur de mode FM . . . . . AUTO et MONO
4. Réglage de balance . . . . . Position centrale
5. Sélecteur de mode . . . . . MW, LW, FM
6. Interrupteur général . . . . . ON
7. La sortie du générateur de signaux ne doit pas être plus élevée que nécessaire pour obtenir une indication de sortie.
8. S'assurer que l'enceinte acoustique est raccordée à l'ampli-tuner au moment d'effectuer l'alignement (ou utiliser des resistances de charge fictive de 8 Ω)

ETAPE	GÉNÉRATEUR DE SIGNAUX OU GÉNÉRATEUR DE BALAYAGE		POSITION DU CURSEUR SUR LE CADRAN	VOLTMETRE ou OSCILLOSCOPE	AJUSTER	REMARQUES
	CONNEXION	FREQUENCE				
ALIGNMENT DE F.I.ET H.F. EN AM						
1 (MW)	Former une boucle de plusieurs tours de cable et faire rayonner le signal par la boucle de l'ampli-tuner	455 kHz à à 30% modul. 400 Hz	Point de non interférence	Voltmètre sur la prise du haut-parleur gauche (L).	T201 (AM IF)	Ajuster pour obtenir un niveau de sortie maximum
2 (MW)		511 kHz à à 30% modul. à 400 Hz	511 kHz		L206 (MW OSC) L203 (MW ANT)	Ajuster pour obtenir un niveau de sortie maximum
3 (MW)		1650 kHz à 30% modul. à 400 Hz	1650 kHz		CT203 (Trimmer MW OSC) CT201 (Trimmer MW ANT)	Ajuster pour obtenir un niveau de sortie maximum. Répéter les opérations (2) et (3).
4 (LW)		142 kHz à 30% modul. à 400 Hz	142 kHz		L207 (LW OSC) L204 (LW ANT)	Ajuster pour obtenir un niveau de sortie maximum.
5 (LW)		360 kHz à 30% modul. à 400 Hz	360 kHz		CT204 (Trimmer LW OSC) CT202 (Trimmer LW ANT)	Ajuster pour obtenir un niveau de sortie maximum. Répéter les opérations (2) et (3).
ALIGNEMENT FM-IF						
1	Position haute par 5 pF à TP101 (IC101) et TPE (masse).	10.7 MHz (400 kHz SWP).	Point de non interférence	Connecter l'entrée de l'amplif.vert de l'oscilloscope à TP201 et TP202 (masse).	T101 (FM IF)	• Ajuster pour que l'amplitude soit maximale et la courbe symétrique. • **Se référer à la remarque**
2					T203 (disque FM)	• Ajuster pour que l'amplitude soit maximale et linéarité appropriée entre des mesures d'environ ±100kHz
Remarque:	**Avant de procéder à l'alignement dans étape 1, tourner les noyaux de T203 à found dans le sens contraire des aiguilles d'une montre.**					
ALIGNEMENT FM-RF						
1	Raccorder la borne d'antenne EXT. FM par l'intermédiaire d'une antenne fictive. (75 ohms).	87,0 MHz à 30% modul. à 400 Hz.	87,0 MHz	Voltmètre sur la prise du haut-parleur gauche (L).	L104 (Bobine FM OSC) L103 (Bobine FM ANT)	Ajuster pour obtenir un niveau de sortie maximum.
2		108,5 MHz à 30% modul. à 400 Hz.	108,5 MHz		CT102 (Trimmer FM OSC) CT101 (Trimmer FM ANT)	Ajuster pour obtenir un niveau de sortie maximum. Répéter les opérations (1) et (2).

Remarques:
1. **Comme on aura trois lectures de sortie présentes, les réglages doivent être faits à la fréquence centrale.**
2. **Pour corriger la dérive sur l'échelle d'accord FM (87,5 ou 108 MHz), régler la bobine L104 et le condensateur d'antenne CT102 l'un avec l'autre.**

INSTRUCTIONS D' ALIGNMENT-2

■ **Alignment stéréo FM**

Position des commandes:
Réglage de volume . . . . . Niveau audible du son de haut-parleur
Réglages de tonalité . . . . . Position centrale
Sélecteur de mode . . . . . FM
Réglage de balance . . . . . Position centrale
Contacteur de mode FM . . . . . AUTO

CONNEXION DES INSTRUMENTS	REGLAGE	REMARQUES
Raccorder un fréquencemètre à TP301 et TPE (terre) à 98 MHz (entrée 60 dB sans modulation signal mono).	VR301	Ajuster la résistance VR301 pour que le fréquencemétre indique 19.00 kHz ± 100 Hz .

■ **Alignment du magnétophone à cassette**

ALIGNEMENT DE PREMAGNETISATION

Position des commandes:
1. Sélecteur de mode . . . . . Tape
2. Réglage de la platine . . . . . Mode d'enregistrement

ETAPE	PARTIE D'ALIGNEMENT	CONNEXION DU VOLTMETRE		WDS	REGLAGE	REMARQUES
		POSITIF	NÉGATIF			
1	Prémagnétisation d'enregistrement	TP402	TP401	B	VR801	Ajuster VR301 pour obtenir une indication de 3,7 ± 0,1 mV au voltmètre électronique.
2	Prémagnpétisation effacement	TP802	TP801	B	.....	Vérifier si la voltage est bien de 50 ~ 80 mV.

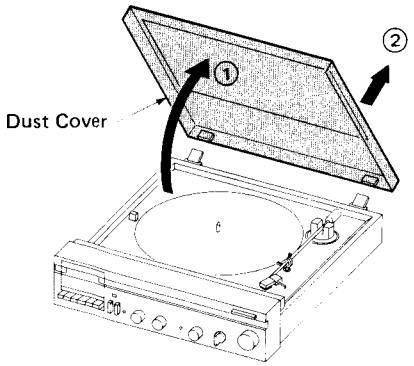
ALIGNEMENT DE AZIMUT

Positions des réglages:
1. Sélecteur de mode . . . . . Tape
2. Réglage de la platine . . . . . Mode de lecture

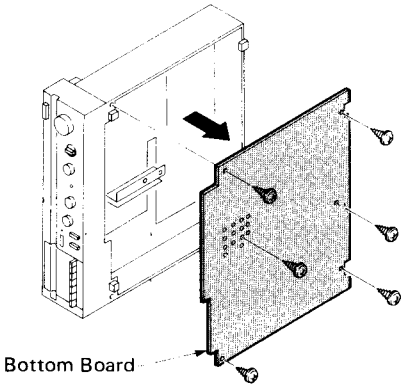
ETAPE	PARTIE D'ALIGNEMENT	CONNEXION DU VOLTMETRE		NIVEAU BANDE D'ÉNTALONNAGE	REGLAGE	REMARQUES
		POSITIF	NÉGATIF			
1	Azimut de tête combinée enregis. -lecture	Borne de haut-parleur	Borne de haut-parleur	10 kHz -5 dB	Vis de tête	• Ajuster la vis pour obtenir une indication maxi. au voltmètre électronique.

DISASSEMBLY INSTRUCTIONS

❶ Remove Dust Cover

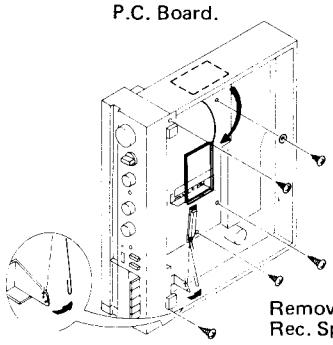


❷ Remove Bottom Board

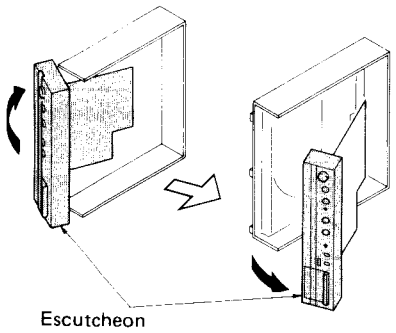


❸ Remove Screw

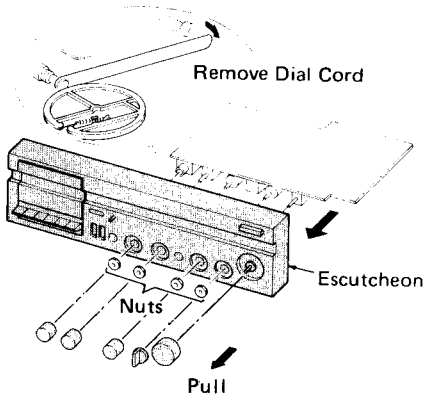
CAUTION: Disconnect the lead clamp for P.C. Board.



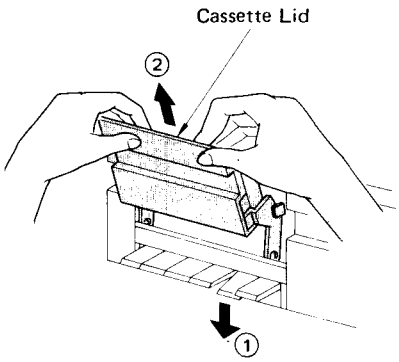
❹ Remove Escutcheon-1



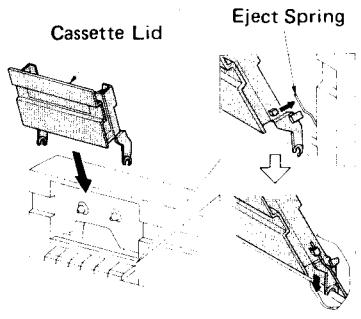
❺ Pull Knobs and Remove Escutcheon-2



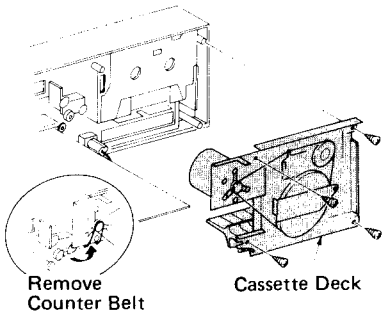
❻ Remove Cassette Lid



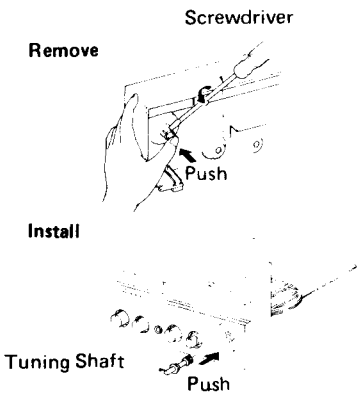
❼ Install Cassette Lid



❽ Remove Cassette Deck



❾ Replace Tuning Shaft



For SG-V03

- **To Replace Parts on P.C. Board** . . . . . Refer to ❶ ~ ❹
- **To Remove Escutcheon** . . . . . Refer to ❶ ~ ❻
- **To Remove Cassette Deck** . . . . . Refer to ❶ ~ ❻ , ❽
- **To Replace Tuning Shaft** . . . . . Refer to ❶ ~ ❺ , ❾

ALIGNMENT INSTRUCTIONS-1

■ **Radio**

Control Positions:

1. Volume Control . . . . . Center (AM-IF, RF, FM-RF), Minimum (FM-IF)
2. Tone Control . . . . . Center
3. FM Mode Selector . . . . . Auto, Mono
4. Balance Control . . . . . Center
5. Function Selector . . . . . MW, LW, FM
6. Power Switch . . . . . ON
7. Output of signal generator should be no higher than necessary to obtain output reading.
8. Make certain that speaker system is connected to the receiver when aligning. (or use 8Ω dummy load resistors.)

STEP	SIGNAL GENERATOR OR SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
	CONNECTION	FREQUENCY				
AM-IF AND RF ALIGNMENT						
1 (MW)	Fashion loop of several turns of wire and radiate signal into loop of receiver.	470kHz(UK only) 455kHz(except UK) 30% Mod.	Point of non-interference	Output meter across speaker jack (L).	T201 (AM IF)	• Adjust for maximum output
2 (MW)		511 kHz 30% Mod. with 400 Hz	511 kHz		L206 (MW OSC) L203 (MW ANT)	• Adjust for maximum output.
3 (MW)		1650 kHz 30% Mod. with 400 Hz	1650 kHz		CT203 (MW OSC Trimmer) CT201 (MW ANT Trimmer)	Adjust for maximum output. Repeat steps (2) and (3).
4 (LW)		142 kHz 30% Mod. with 400 Hz	142 kHz		L207 (LW OSC) L204 (LW ANT)	• Adjust for maximum output.
5 (LW)		360 kHz 30% Mod. with 400 Hz	360 kHz		CT204 (LW OSC Trimmer) CT202 (LW ANT Trimmer)	• Adjust for maximum • Repeat steps (2) and (3).
FM-IF ALIGNMENT						
1	High side through 5pF to point TP101 (IC101) and TPE (earth).	10.7 MHz (400 kHz SWP).	Point of non-interference	Connect vert.amp. input of scope to point TP201 and TP202 (ground).	T101 (FM IF)	• Adjust for maximum amplitude and symmetrical curve. • **Refer to Note.**
2					T203 (FM Disc)	Adjust for maximum amplitude and proper linearity between about ±100 kHz markers.
Note: Before aligning step 1, turn the core of T203 fully counterclockwise.						
FM-RF ALIGNMENT						
1	Connect to EXT. FM antenna terminal through Dummy antenna (75 Ω)	87.0 MHz 30% Mod. with 400 Hz	87.0 MHz	Output meter across speaker jack (L).	L104 (FM OSC Coil) L103 (FM ANT Coil)	Adjust for maximum output
2		108.5 MHz 30% Mod. with 400 Hz	108.5 MHz		CT102 (FM OSC Trimmer) CT101 (FM ANT Trimmer)	Adjust for maximum output. Repeat steps (1) and (2).

Notes:
1. **As three output readings will be present, adjustments must be made at center frequency.**
2. **To correct the drift of FM band coverage (87.5 or 108 MHz) adjust the coil L104 and the trimmer CT102.**

ALIGNMENT INSTRUCTIONS-2

■ FM Stereo Alignment

Control Positions:
Volume Control . . . . . Audible level of speaker sound
Tone Control . . . . . Center
Function Selector . . . . . FM
Balance Control . . . . . Center
FM Mode Selector . . . . . AUTO

EQUIPMENT CONNECTION	ADJUST	REMARKS
Connect frequency counter to TP301 and TPE (ground) at 98 MHz, non modulation with 60 dB input (Mono Signal).	VR301	Adjust VR301 for 19.00 kHz ± 100 Hz on frequency counter reading.

■ Cassette Tape Deck Alignment

BIAS ALIGNMENT

Control Positions:
1. Function Selector . . . . . Tape
2. Tape Deck Condition . . . . . Recording Condition

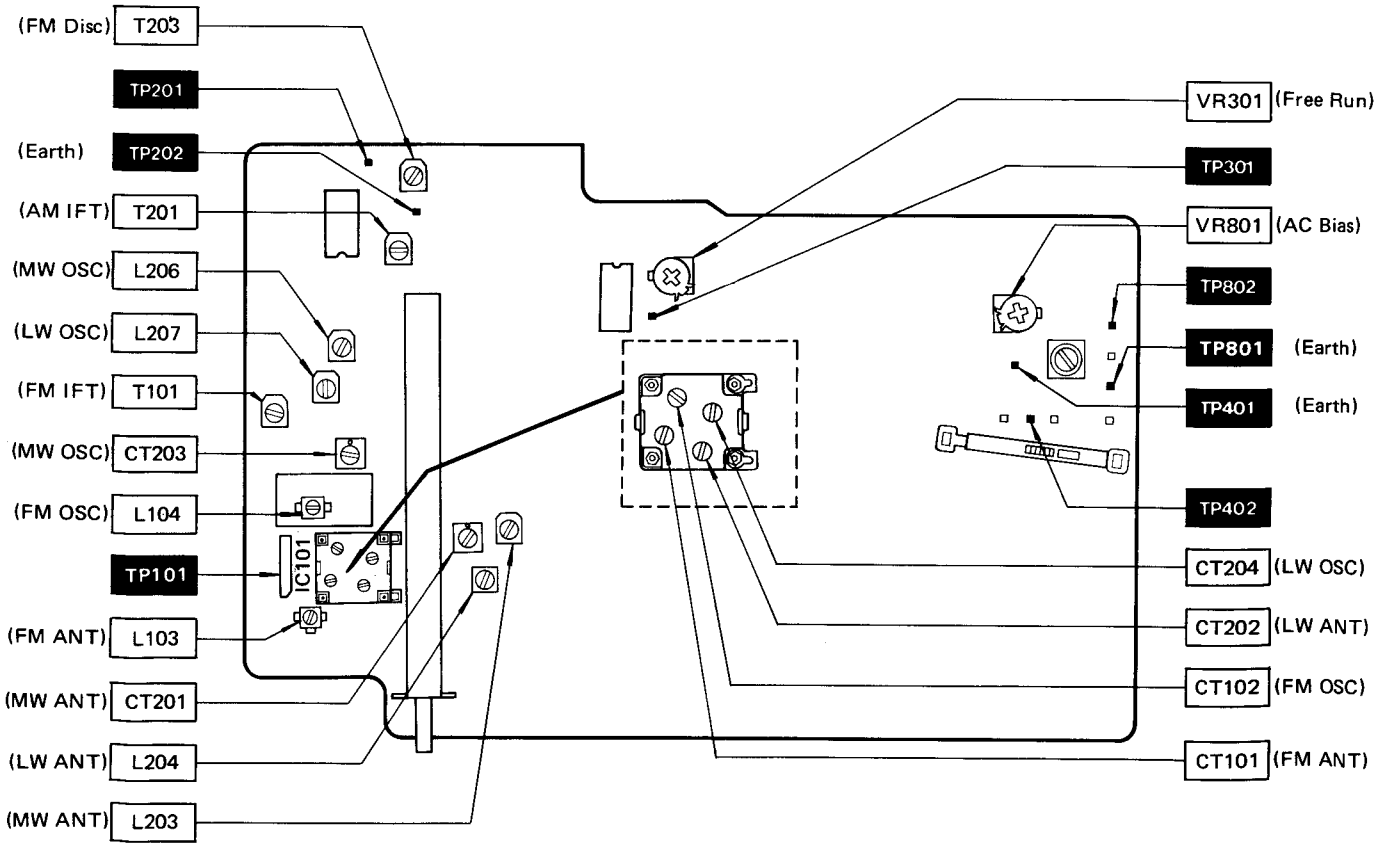
STEP	ALIGNMENT ITEM	VTVM CONNECTION		WHISTLE DEFEAT SW	ADJUST	REMARKS
		Positive	Negative			
1	Recording Bias	TP402	TP401	B	VR801	Adjust VR801 to get 3.7±0.1 mV reading on VTVM.
2	Erase Bias	TP802	TP801	B	.....	Confirm the voltage reading is between 50mV to 80 mV on VTVM.

AZIMUTH ALIGNMENT

Control Positions:
1. Function Selector . . . . . Tape
2. Tape Deck Condition . . . . . PLAY Condition

STEP	ALIGNMENT ITEM	VTVM CONNECTION		TEST TAPE LEVEL	ADJUST	REMARKS
		Positive	Negative			
1	R/P Head Azmimuth	Speaker Terminal	Speaker Terminal	10 kHz −5dB	Head Screw	Adjust screw for max. indication on VTVM.

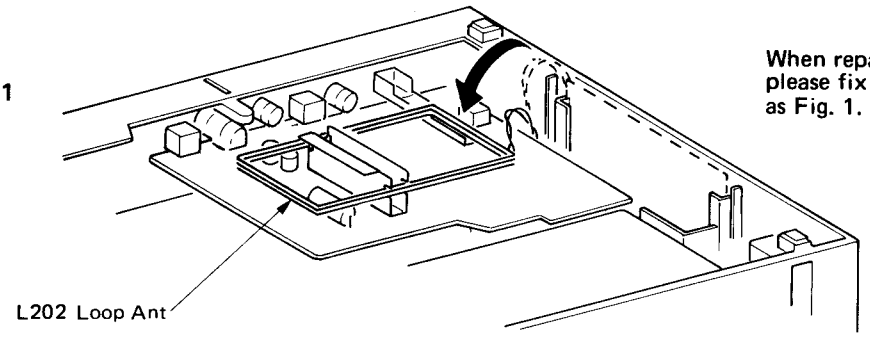
ALIGNMENT POINTS



SERVICE AID

■ **Disposition of AM Loop Antenna**

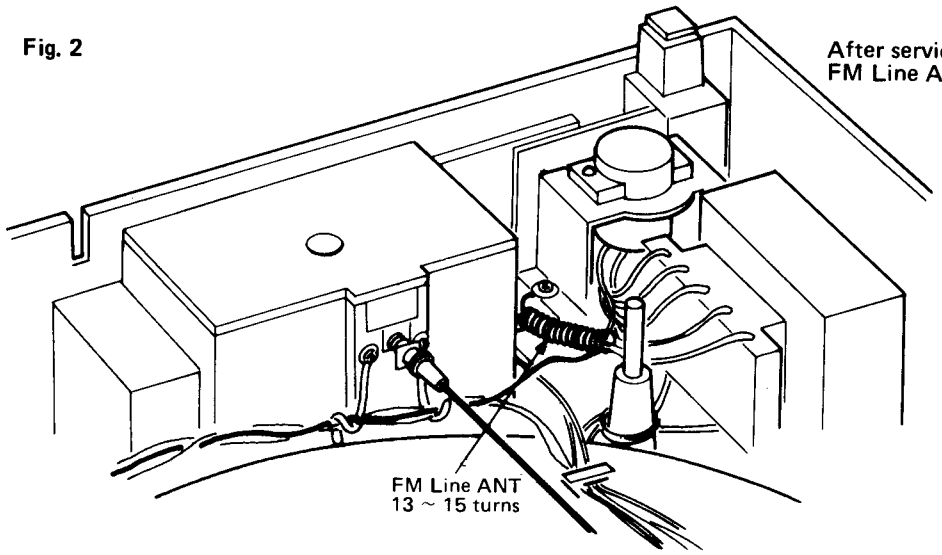
Fig. 1



When repairing the P.C. Board, please fix Loop Antenna (L 202) as Fig. 1.

■ **Disposition of FM Line Antenna**

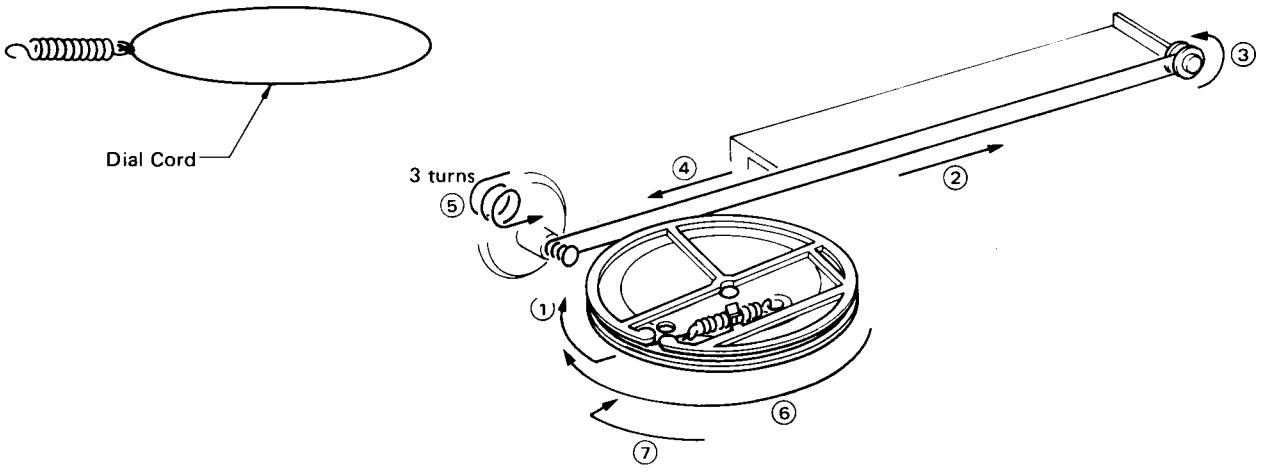
Fig. 2



After servicing, please deal with FM Line Antenna as Fig. 2.

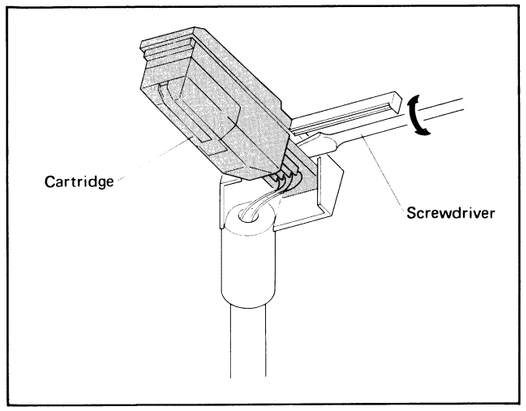
DIAL CORD STRINGING GUIDE

Note:
Dial Drum . . . . . Turn Fully Clockwise
Dial Cord Loop Length . . 105.6 cm

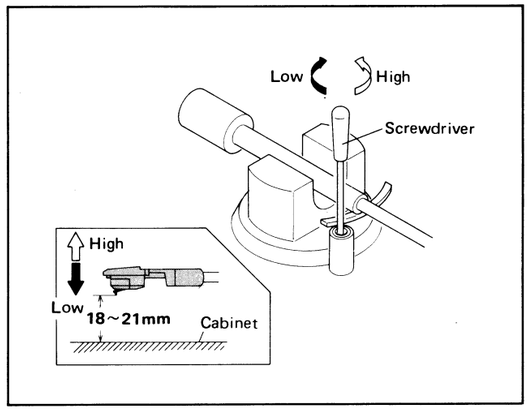


SERVICING THE RECORD PLAYER AND RECORD CHANGER

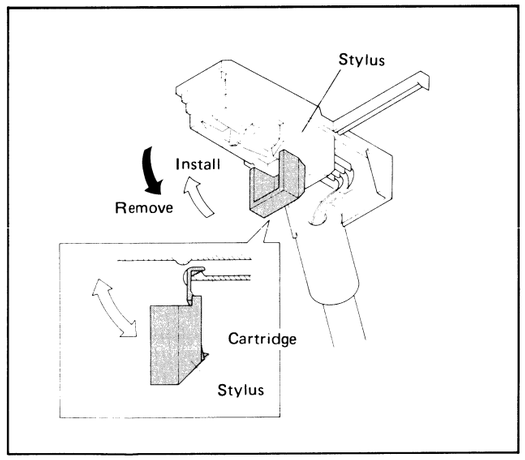
■ CARTRIDGE REPLACEMENT



■ TONE ARM LIFTING HEIGHT ADJUSTMENT

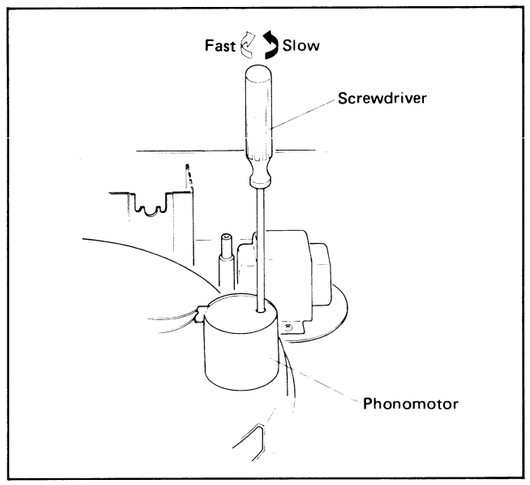


■ STYLUS REPLACEMENT

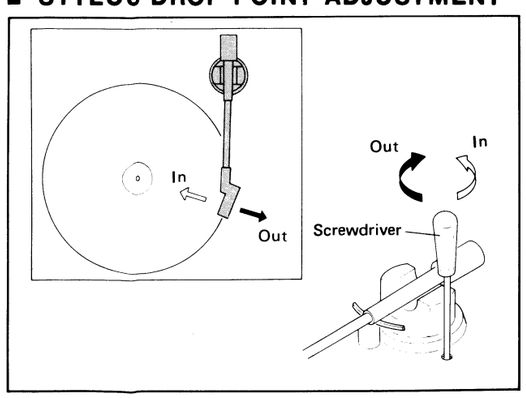


■ MOTOR SPEED ADJUSTMENT

Adjust the screw when the turntable rotation going out of normal speed.

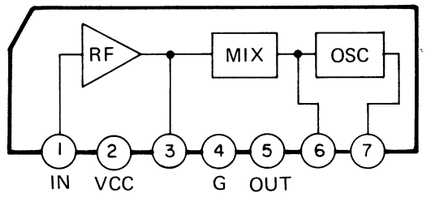


■ STYLUS DROP POINT ADJUSTMENT

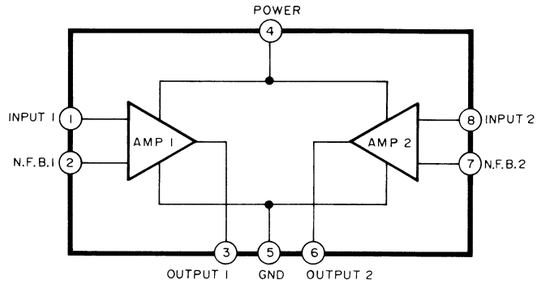


IC BLOCK DIAGRAM

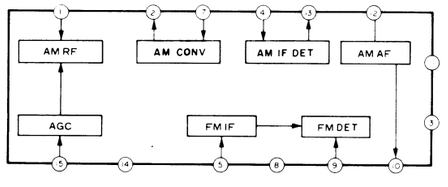
IC 101 AN7213



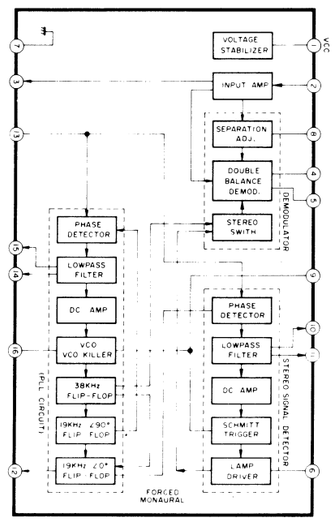
IC 401 BA328



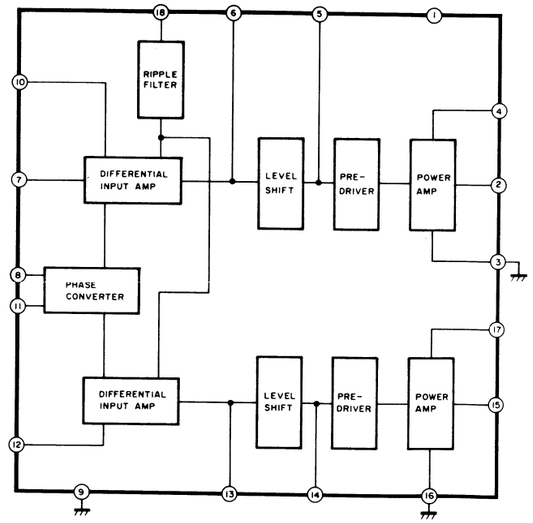
IC 201 AN7220B



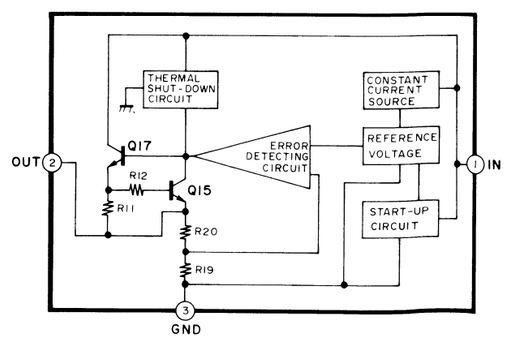
IC 301 AN7410N



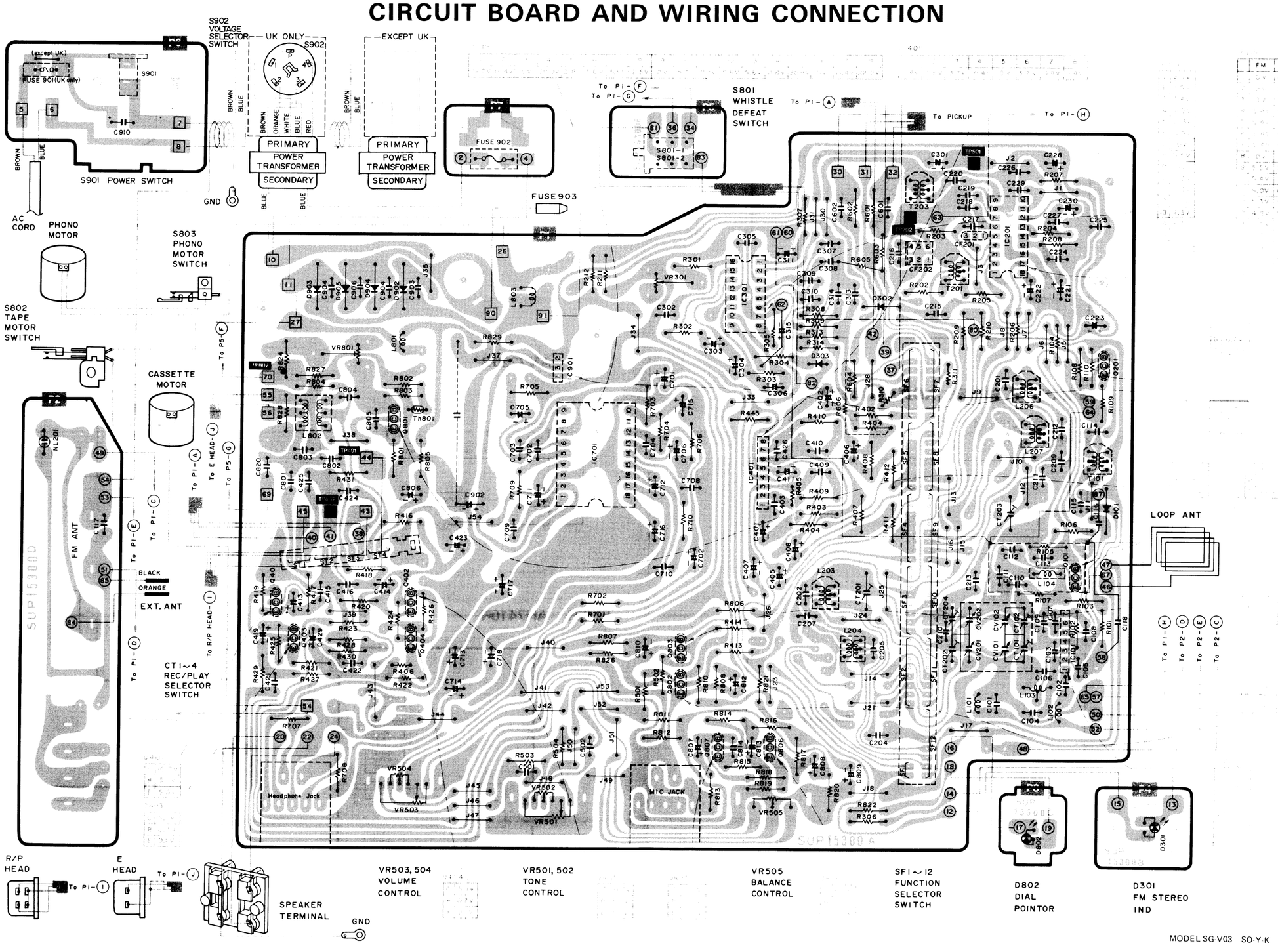
IC 701 AN7146H



IC 901 AN7812



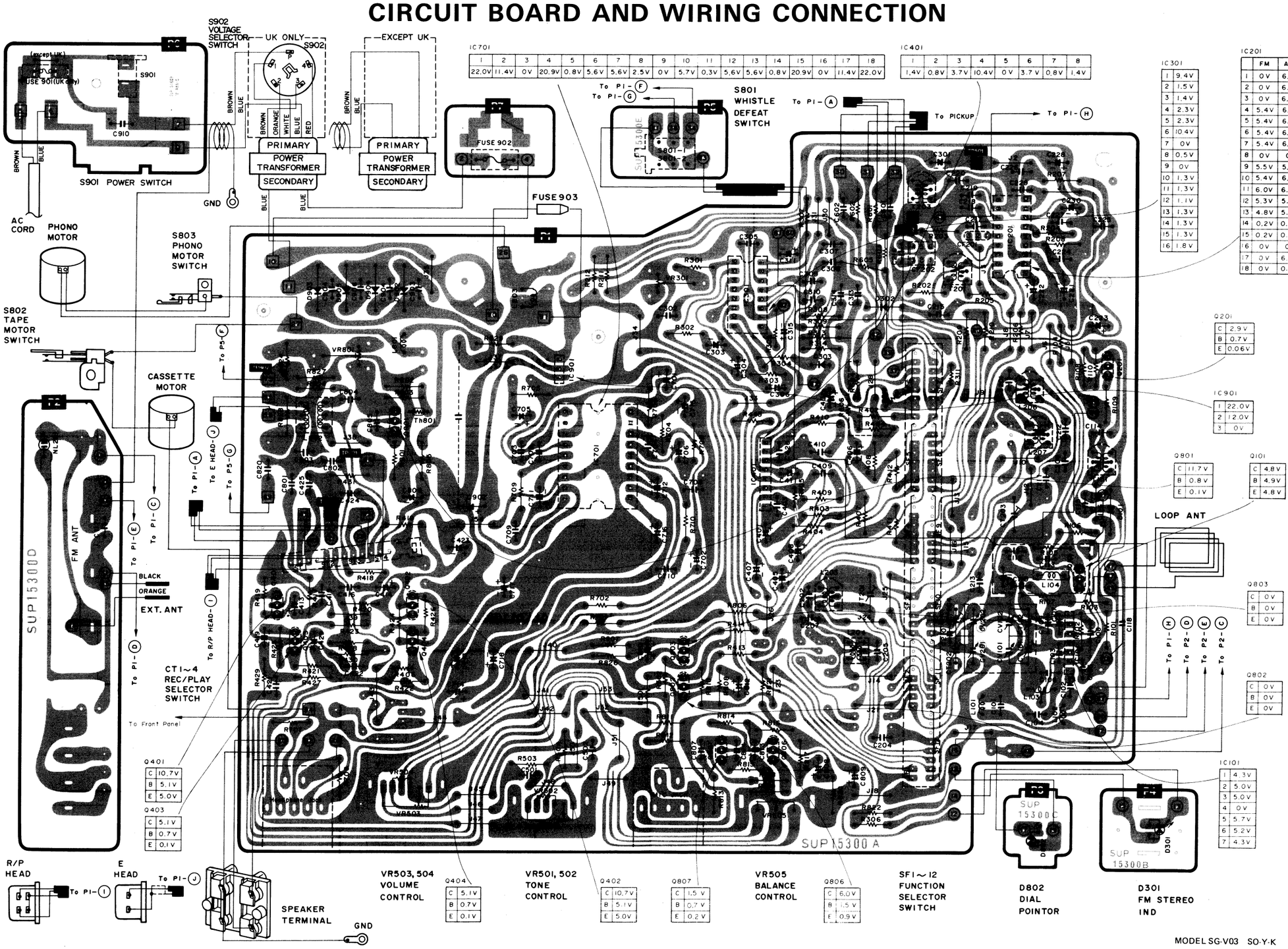
CIRCUIT BOARD AND WIRING CONNECTION



MODEL SG-V03 SO-Y-K

* This diagram might be modified without notice for further development of technology.

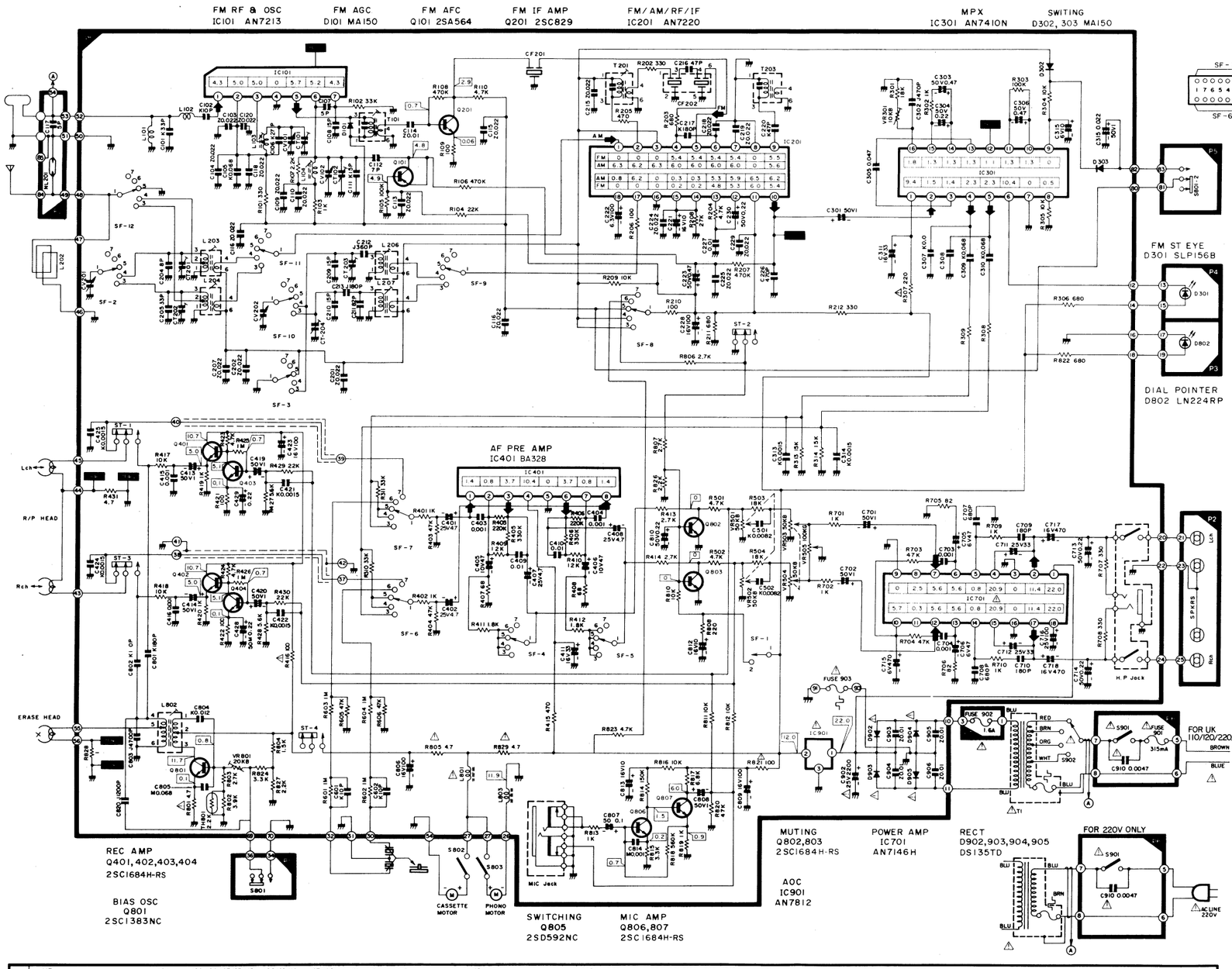
CIRCUIT BOARD AND WIRING CONNECTION



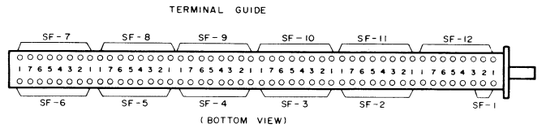
MODEL SG-V03 SO-Y-K

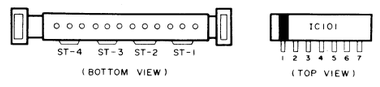
* This diagram might be modified without notice for further development of technology.

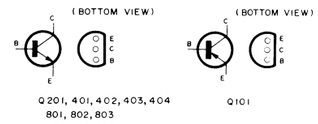
SCHEMATIC DIAGRAM

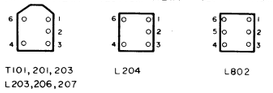


TERMINAL GUIDE









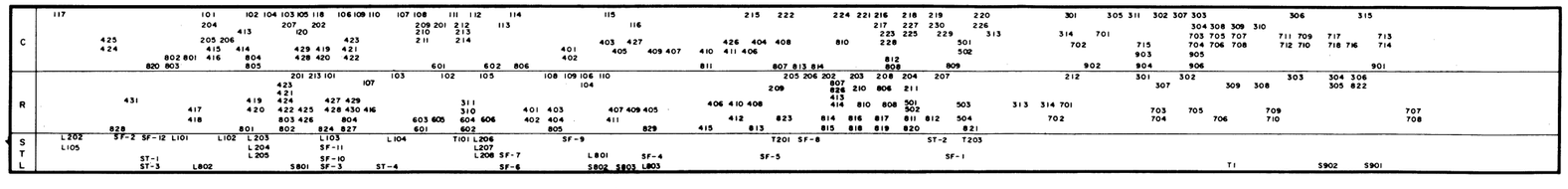
NOTES

1) S901 POWER SWITCH IN "OFF" POSITION
S803 PHONO MOTOR SWITCH IN "OFF" POSITION
S802 TAPE MOTOR SWITCH IN "OFF" POSITION
S801 WHISTLE DEFEAT SWITCH IN " A " POSITION
ST1~4 REC/PLAY SELECTOR SWITCH IN "PLAY" POSITION
SF1~12 FUNCTION SELECTOR SWITCH IN "FM" POSITION
(1 COMMON 3 LW 4 MW 5 FM AUTO 6 PHONO 7 TAPE)

2) LETTERS
J, K, M, Z AND P INDICATE TOLERANCE OF CAPACITORS AS FOLLOWS
J: ±5%, K: ±10%, M: ±20%, Z: +80% -20%, P: +100% -0%

3) DC VOLTAGE ARE TO DEMEASURED WITH VTVM UNDER NO SIGNAL CONDITION IN "FM" OR "MW" POSITION

IMPOTANT SAFETY NOTICE
COMPONENTS IDENTIFIED BY △ MARK HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY MANUFACTURER'S SPECIFIED PARTS



SCHEMATIC DIAGRAM
MODEL NO. SG-V03(L)

* This diagram might be modified without notice for further development of technology.

REPLACEMENT PARTS LIST

NOTE:
1. Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
2. Parts No. listed in this Parts List are of Service Parts.

Ref. No.	Part No.	Description	Per Set (pcs.)
TRANSISTORS			
Q101	2SA722-S	FM AFC	1
Q201	2SC829-B	FM IF AMP	1
Q401, 402	2SC1684H-R	Rec. Amp	2
Q403, 404	2SC1684H-R	Rec. Amp	2
Q801	2SC1383NC-S	Bias OSC	1
Q802, 803	2SC1684H-R	Muting	2
Q806, 807	2SC1684H-R	Mic. Amp	2
INTERGRATED CIRCUITS			
IC101	AN7213	FM RF	1
IC201	AN7220B	FM AM IF, DET	1
IC301	AN7410N	MPX	1
IC401	BA328	AF	1
IC701	AN7146H	Power	1
IC901	AN7812	AOC	1
FUSES			
F901 ⚠	XBAS2C03T1A	FUSE 250V T315mA (for UK)	1
F902 ⚠	XBAS2C16T2A	FUSE 250V T1.6A	1
F903 ⚠	XBE10M103	FUSE 250V 10A	1
DIODES AND THERMISTER			
D101	MA162A	FM AGC	1
D301	SLP156B	FM Stereo Eye	1
D302	MA162A	Switching	1
D303	MA162A	Switching	1
D802	LN224RP	Dial Pointer	1
D902, 903	DS135TD	RECT	1
D904, 905	DS135TD	RECT	2
TH801	ERTD2FHK202S	Thermister	1
COILS AND TRANSFORMERS			
L101	RLQY15S5-0	Coil, Choke	1
L102	SLQY38S2-0	Coil, Choke	1
L103	SLD4N22-M	ANT Coil, FM	1
L104	SL04N30-M	OSC Coil, FM	1
L202	SSA4	ANT Coil, Loop	1
L203	SLA2M2-M	ANT Coil, MW	1
L204	SLA1B2-K	ANT Coil, LW	1
L206	SL02M6-M	OSC Coil, MW	1
L207	SL01M10-M	OSC Coil, LW	1
L801	SLQU270-4Y	Choke Coil	1
L802	SL09Z38-K	Bias OSC Coil	1
L803	SLQU270-4Y	Choke Coil	1

Ref. No.	Part No.	Description	Per Set (pcs.)
T1 ⚠	SLT5V40-W	Power Transformer (for UK, NPG(M))	1
⚠	SLT5V42-W	Power Transfosmer	1
T101	RLI4M101-M	FM IFT	1
T201	QL12M102-M	AM IFT	1
T203	RLI4M101-M	AM 2nd IFT	1
CF201	SVF107MA53	FM CFT	1
CF202	SLI9B902-Q	AM CFT (for UK, NPG(M))	1
	QCRZZ455A7W	AM CFT	1
NL201	SAG20P152FH	Neon Lamp	1
VARIABLE CAPACITORS			
CV101, 102 201, 202 (CT101, 102, 202, 205)	RCV4RC2VK-M	Tuning Capacitor with Trimmer	1
CT201, 203	RCVCTY12B218	Trimmer	2
VARIABLE RESISTORS			
VR301	SVNAA14B2-Q	Free Run, 10kΩB	1
VR501, 502	EWCSMAF20A54	Tone, 50kΩA	1
VR503, 504	EWCSMAF25B54	Volume 50kΩB	1
VR505	EWHGFAF20G15	Balance 100kΩG	1
VR801	SVNAA24B2-Q	Bias, 20kΩB	1
SWITCHES			
SF1 ~ 12	SSR204	Function	1
ST1 ~ 4	SSS116	Rec/Play	1
S801	SSH150	WDS	1
S901 ⚠	ESB822S	Power	1
S902 ⚠	ESE3742	Voltage Selector (for UK, NPG(M))	1
PACKING			
PA1	SPN5106	Pad, Front	1
PA2	SPN5108	Pad, Rear	1
PA3	XZB75X67C05	Set Cover	1
PA4	SQX50500	Instruction Book	1
PA5	SPN5152	Pad,	1
PA6	SPN5164	Pad	1
PA7	SPN5110	Pad	1
PA8	SPN5160	Carton Box	1

REPLACEMENT PARTS LIST

Numbering System of Resistor

Type	Wattage	Tolerance	Value
Three Letters	One or Two Letters	Two or Three Letters	Three or Four Letters

Example:

E R D 2 5 T J 1 0 1

Resistor Type	Tolerance
ERD: Carbon Film ERC: Solid ERX: Metal Film ERG: Metal Oxide Film ERO: High Stability Metal Film ERF: Flameproof Wire-Wound Bath-Tube ERQ: Fuse Type Metal Film	F: ±1% J: ±5% K: ±10%

Ref. No.	Part No.	Description (Unit: Ω)		Per Set (pcs.)
RESISTORS				
R101	ERD25FJ331	330	1/4W	1
R102	ERD25TJ333	33k	1/4W	1
R103	ERD25FJ102	1k	1/4W	1
R104	ERD25TJ223	22k	1/4W	1
R105	ERD25TJ104	100k	1/4W	1
R106	ERD25TJ474	470k	1/4W	1
R107	ERD25FJ222	2.2k	1/4W	1
R108	ERD25TJ474	470k	1/4W	1
R109	ERD25FJ560	56	1/4W	1
R110	ERD25FJ472	4.7k	1/4W	1
R202	ERD25FJ331	330	1/4W	1
R203	ERD25FJ681	680	1/4W	1
R204	ERD25FJ472	4.7k	1/4W	1
R205	ERD25FJ471	470	1/4W	1
R206	ERD25FJ101	1k	1/4W	1
R207	ERD25TJ474	470k	1/4W	1
R208	ERD25TJ273	27k	1/4W	1
R209	ERD25FJ103	10k	1/4W	1
R210	ERD25FJ101	100	1/4W	1
R211	ERD25FJ681	680	1/4W	1
R212	ERD25FJ331	330	1/4W	1
R301	ERD25TJ183	18k	1/4W	1
R302	ERD25FJ102	1k	1/4W	1
R303	ERD25TJ104	100k	1/4W	1
R304, 305	ERD25FJ103	10k	1/4W	2
R306	ERD25FJ681	680	1/4W	1
R307	ERD2FCG221P	220	2W	1
R308, 309	ERD25TJ333	33k	1/4W	2
R310, 311	ERD25TJ333	33k	1/4W	2
R313, 314	ERD25TJ153	15k	1/4W	2
R401, 402	ERD25FJ102	1k	1/4W	2
R403, 404	ERD25TJ473	47k	1/4W	2
R405, 406	ERD25TJ224	220k	1/4W	2
R407, 408	ERD25FJ680	68	1/4W	2
R409, 410	ERD25TJ123	12k	1/4W	2
R411, 412	ERD25FJ182	1.8k	1/4W	2

Ref. No.	Part No.	Description (Unit: Ω)		Per Set (pcs.)
R413, 414	ERD25FJ272	2.7k	1/4W	2
R415	ERD25FJ471	470	1/4W	1
R416	ERD2FCG101P	100	2W	1
R417, 418	ERD25FJ103	10k	1/4W	2
R419, 420	ERD25FJ102	1k	1/4W	2
R421, 422	ERD25FJ101	100	1/4W	2
R423, 424	ERD25FJ472	4.7k	1/4W	2
R425, 426	ERD25TJ105	1M	1/4W	2
R427, 428	ERD25FJ562	5.6k	1/4W	2
R429, 430	ERD25TJ223	22k	1/4W	2
R431	ERD25FJ4R7	4.7	1/4W	1
R501, 502	ERD25FJ472	4.7k	1/4W	2
R503, 504	ERD25TJ183	18k	1/4W	2
R601, 602	ERD25TJ105	1M	1/4W	2
R603, 604	ERD25TJ105	1M	1/4W	2
R605, 606	ERD25TJ473	47k	1/4W	2
R701, 702	ERD25FJ102	1k	1/4W	2
R703, 704	ERD25TJ473	47k	1/4W	2
R705, 706	ERD25FJ820	820	1/4W	2
R707, 708	ERD25FJ331	330	1/4W	2
R709, 710	ERD25FJ102	1k	1/4W	2
R801	ERD2FCJ4R7P	4.7	2W	1
R802	ERD25FJ392	3.9k	1/4W	1
R803	ERD25FJ272	2.7k	1/4W	1
R804	ERD25FJ152	1.5k	1/4W	1
R805	ERD2FCJ4R7P	4.7	2W	1
R806, 807	ERD25FJ272	2.7k	1/4W	2
R808	ERD25FJ221	220	1/4W	1
R810, 811	ERD25FJ103	10k	1/4W	2
R812	ERD25FJ103	10k	1/4W	1
R813	ERD25FJ102	1k	1/4W	1
R814	ERD25TJ154	150k	1/4W	1
R815	ERD25FJ332	3.3k	1/4W	1
R816	ERD25FJ103	10k	1/4W	1
R817	ERD25FJ682	6.8k	1/4W	1
R818	ERD25TJ564	560k	1/4W	1
R819	ERD25FJ102	1k	1/4W	1
R820	ERD25TJ473	47k	1/4W	1
R821	ERD2FCG101P	100	2W	1
R822	ERD25FJ681	680	1/4W	1
R824	ERD25FJ332	3.3k	1/4W	1
R826, 827	ERD25FJ222	2.2k	1/4W	2
R828	ERD25FJ1R0	1	1/4W	1
R829	ERD2FCJ4R7P	4.7	2W	1

REPLACEMENT PARTS LIST

Numbering System of Capacitor

Type	Voltage	Value	Tolerance
Four Letters	One or Two Letters	Two to Five Letters	One or Two Letters

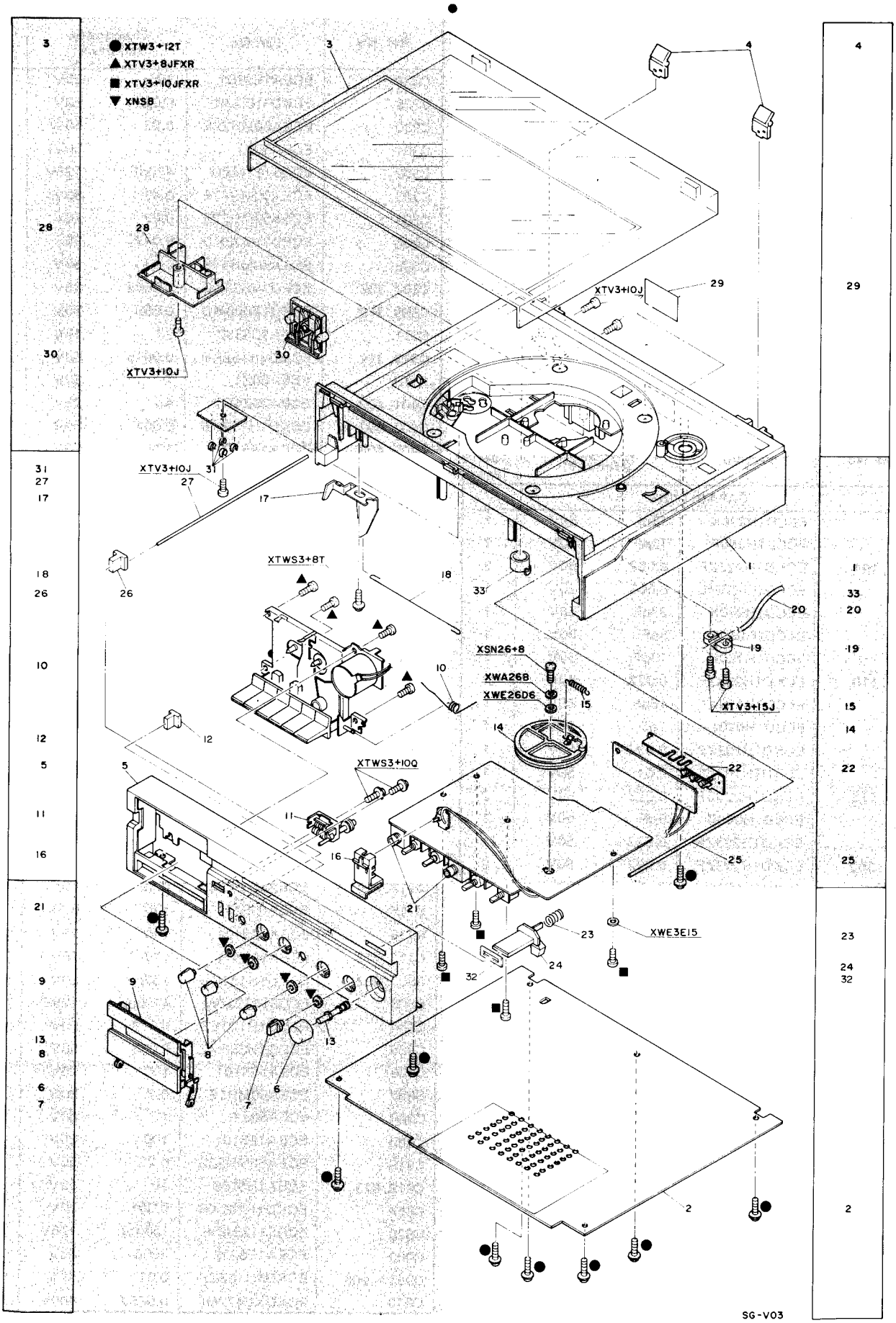
Example:

E C K D 1 H 3 3 3 M D

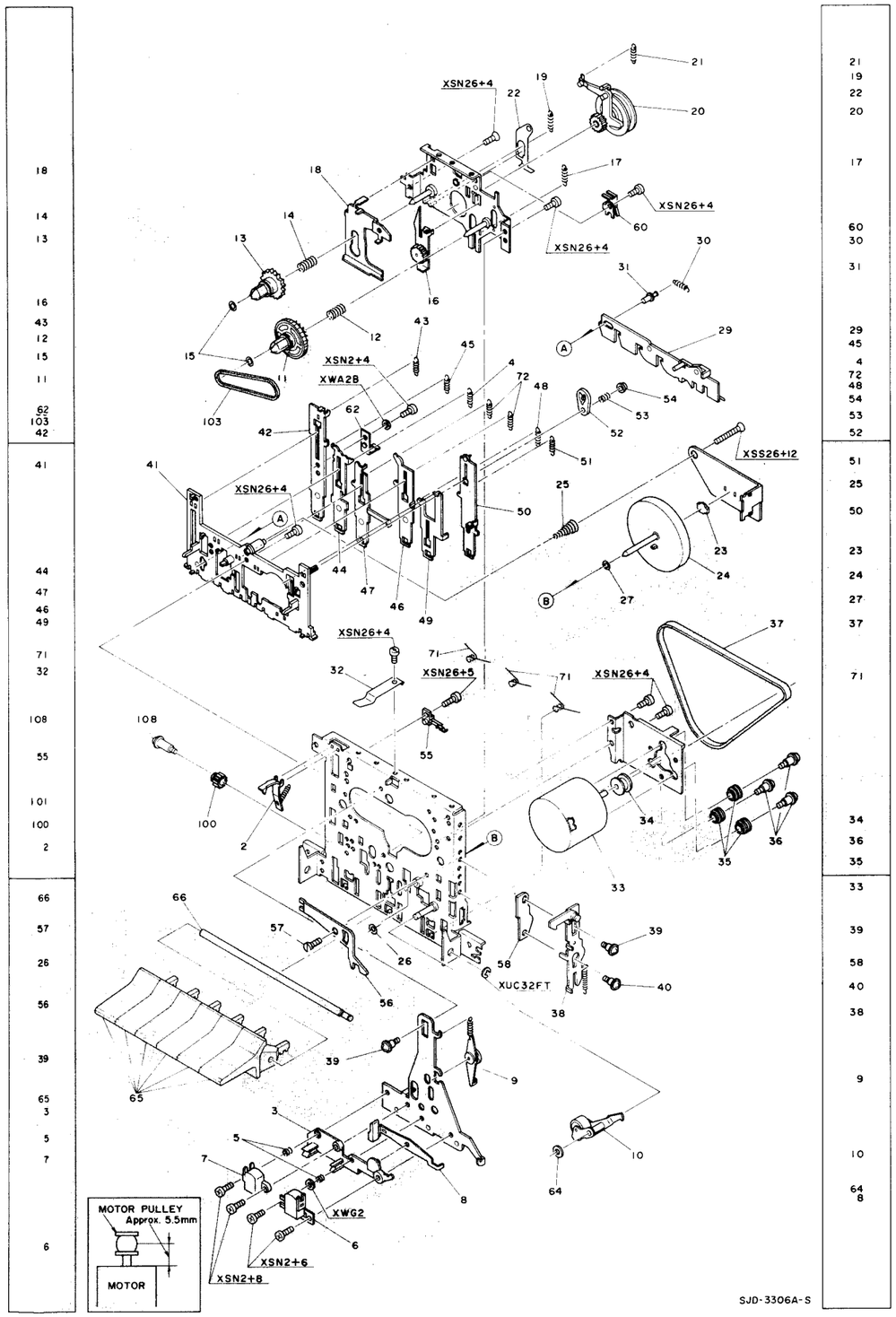
Capacitor Type	Tolerance
ECCD: Temperature Compensating Ceramic	C: ±0.25pF
ECKD: High Dielectric Constant Ceramic	D: ±0.5pF
ECQM: Polyester	F: ±1pF
ECQP: Polypropylene Film	J: ±5%
ECQS: Polystyrene Film	K: ±10%
ECFD: Semiconductor Ceramic	M: ±20%
ECEA: Electrolytic	P: +100, -0%
ECEB: Electrolytic	Z: +80, -20%
ECET: Electrolytic	
ECSF: Tantalum	
ECUX: Chip	

Ref. No.	Part No.	Description (Unit: μF)		Per Set (pcs.)
CAPACITORS				
C101	ECCD1H330K	33pF	50V	1
C102	ECCD1H100F	10pF	50V	1
C103, 104	ECKD1H223ZF	0.022	50V	2
C105	ECFD1E683MD	0.068	25V	1
C106	ECCD1H270K	27pF	50V	1
C107	ECCD1H050D	5pF	50V	1
C108	ECCD1H150K	15pF	50V	1
C109, 110	ECKD1H223ZF	0.022	50V	2
C111	ECCD1H150K	15pF	50V	1
C112	ECCD1H070D	7pF	50V	1
C113	ECKD1H223ZF	0.022	50V	1
C114	ECKD1H103ZF	0.01	50V	1
C115, 116	ECKD1H223ZF	0.022	50V	2
C117	ECCD1H050D	5pF	50V	1
C118	ECKD1H223ZF	0.022	50V	1
C201, 202	ECKD1H223ZF	0.022	50V	2
C204	ECCD1H080D	8pF	50V	1
C205	ECCD1H330K	33pF	50V	1
C207	ECKD1H223ZF	0.022	50V	1
C209	ECCD1H180K	18pF	50V	1
C210	ECCD1H100F	10pF	50V	1
C211	ECCD1H820K	82pF	50V	1
C212	ECQS1361JZW	360pF	125V	1
C213	ECQS1181JZW	180pF	125V	1
C215	ECKD1H223ZF	0.022	50V	1
C216	ECCD1H470K	47pF	50V	1
C217	ECKD1H181KB	180pF	50V	1
C218, 219	ECKD1H223ZF	0.022	50V	2
C220	ECCD1H470K	47pF	50V	1
C221	ECEA1HS100	10	50V	1
C222	ECEA1AS101	100	10V	1
C223	ECEA50MR47E	0.47	50V	1
C224, 225	ECKD1H223ZF	0.022	50V	2
C226	ECKD1H471KB	470pF	50V	1
C227	ECKD1H103ZF	0.01	50V	1
C228	ECEA1ES101	100	25V	1
C229	ECKD1H223ZF	0.022	50V	1
C230	ECEA50MR22E	0.22	50V	1
C301	ECEA50Z1	1	50V	1
C302	ECQS1471JZW	470pF	125V	1
C303	ECEA50MR47E	0.47	50V	1
C304	ECEA50MR22E	0.22	50V	1
C305	ECFD1V473KD	0.047	35V	1
C306	ECEA50MR47E	0.47	50V	1
C307, 308	ECFD1V822KD	0.0082	35V	2
C309, 310	ECFD1E683MD	0.068	25V	2
C311	ECEA1CS330	33	16V	1
C313, 314	ECKD1H152KB	0.0015	50V	2
C315	ECEA50Z1	1	50V	1
C401, 402	ECEA25Z4R7	4.7	25V	2
C403, 404	ECKD1H102KB	0.001	50V	2
C405, 406	ECEA1AS101	100	10V	2
C407, 408	ECEA25Z4R7	4.7	25V	2
C409, 410	ECFD1V103KD	0.01	35V	2
C411	ECEA1CS330	33	16V	1
C413, 414	ECEA50Z1	1	50V	2
C415, 416	ECKD1H102KB	0.001	50V	2
C419, 420	ECEA50Z1	1	50V	2
C421, 422	ECKD1H152KB	0.0015	50V	2
C423	ECEA1ES101	100	25V	1
C424, 425	ECKD1H152KB	0.0015	50V	2
C428, 429	ECEA50MR22E	0.22	50V	2
C501, 502	ECFD1V822KD	0.0082	35V	2
C601, 602	ECCD1H100F	10pF	50V	2
C701, 702	ECEA50Z1	1	50V	2
C703, 704	ECKD1H102KB	0.001	50V	2
C705, 706	ECEA0JS470	47	10V	2
C707, 708	ECKD1H681KB	680pF	50V	2
C709, 710	ECKD1H181KB	180pF	50V	2
C711, 712	ECEA1VS330	33	35V	2
C713, 714	ECEA50MR22E	0.22	50V	2
C715	ECEA0JS471	470	6.3V	1
C716	ECEA1ES101	100	25V	1
C717, 718	ECEA1CS471	470	16V	2
C801, 802	ECKD1H181KB	180pF	50V	2
C803	ECQS1472JZW	4700pF	125V	1
C804	ECQG1H123KZ	0.012	50V	1
C805	ECQG1H683MZ	0.068	50V	2
C806	ECEA1ES101	100	25V	1
C807	ECEA50MR1E	0.1	50V	1
C808	ECEA50Z1	1	50V	1
C809	ECEA1ES101	100	25V	1
C810	ECEA50MR22E	0.22	50V	1
C812, 813	ECEA1HS100	10	50V	2
C814	ECKD1H102KB	0.001	50V	1
C820	ECQS1122JZW	1200pF	125V	1
C902	ECEA1ES222	2200	25V	1
C903 ~ 906	ECKD1H103ZF	0.01	50V	4
C910 ⚠	ECKDKC472MF	0.0047	400V	1

PARTS LOCATION OF CABINET AND CHASSIS



EXPLODED VIEW OF CASSETTE TAPE DECK



REPLACEMENT PARTS LIST OF CASSETTE TAPE DECK

Ref. No.	Part No.	Description	Per Set (pcs.)
2	SMQ4298	REC Safety Lever w/Spring	1
3	SMQ3894	Head Base	1
4	SMQ3896	Spring, RC	1
5	SMQ3898	Spring, Head	2
6	SJH80	R/P Head	1
7	SJH56	Erase Head	1
8	SMQ4302	Lever Ass'y, Auto Stop	1
9	SMQ4304	Take Up Roller Ass'y w/Spring	1
10	SMQ3904	Pinch Roller Ass'y	1
11	SMQ3906	Reel Ass'y, Take Up	1
12	SMQ3908	Spring, Take Up Reel	1
13	SMQ3910	Reel Ass'y, Supply	1
14	SMQ3912	Spring, Supply Reel	1
15	SMQ3914	Poly Washer	2
16	SMQ4308	FF Idler Arm Ass'y	1
17	SMQ3918	Spring, FF Idler Arm	1
18	SMQ4264	Main Plate	1
19	SMQ3922	Spring, Main Plate	1
20	SMQ4310	RF Clutch Ass'y	1
21	SMQ4312	Spring, RF Clutch	1
22	SMQ4270	Spring Plate, RWD	1
23	SMQ2538	Pad, Flywheel	1
24	SMQ3930	Flywheel	1
25	SMQ3932	Spring, Thrust	1
26	SMQ1402	Nylon Washer	1
27	SMQ3934	Nylon Washer	1
29	SMQ4314	Lock Arm Ass'y	1
30	SMQ3940	Spring, Lock Arm	1
31	SMQ4276	Shaft	1
32	SMQ4278	Spring Plate, Cassette Hold	1
33	MMI6A2RK	Motor	1
34	SMQ1802-1	Pulley, Motor	1
35	SMQ1834	Rubber Cushion, Motor	3
36	SMQ1908	Spacer Screw	3
37	SMQ2556	Main Belt	1
38	SMQ4316	Eject Slide Lever Ass'y w/Spring	1
39	SMQ3950	Spacer Screw	2
40	SMQ3952	Spacer Screw	1
41	SMQ3954	Base, Push Button	1
42	SMQ4318	Slide Lever Ass'y, REC	1
43	SMQ3958	Spring, REC Slide Lever	1
44	SMQ4320	Slide Lever Ass'y, Play	1
45	SMQ3962	Spring, Play Slide Lever	1
46	SMQ4322	Slide Lever Ass'y, FF	1
47	SMQ4324	Slide Lever Ass'y, RWD	1
48	SMQ3968	Spring, Stop Slide Lever	1
49	SMQ4326	Slide Lever, Stop	1
50	SMQ4328	Slide Lever Ass'y, Pause	1
51	SMQ3974	Spring, Pause Slide Lever	1
52	SMQ2444	Click Lever, Pause	1
53	SMQ3976	Spring, Pause Click Lever	1
54	SMQ3978	Stopper, Pause Click Lever	1
55	SMQ3980	Leaf Switch	1

Ref. No.	Part No.	Description	Per Set (pcs.)
56	SMQ3982	Arm Lever	1
57	SMQ3984	Spacer Screw	1
58	SMQ3986	Bracket, Eject	1
60	SMQ4330	Guide Bracket, Main Belt	1
62	SMQ4332	Spring Plate, REC	1
64	SMQ4260	Poly Washer	1
65	SBC488	Button, Cassette	6
66	SMQ4334	Shaft, Cassette Button	1
71	SMQ4344	Spring, Cassette Button	3
72	SMQ4346	Spring, FR Slide Lever	2
100	SMQ4096	Gear, Cassette Holder	1
103	SMQ4066	Belt, Counter	1
108	SNE270	Spacer Screw	1

SJD3306A-S

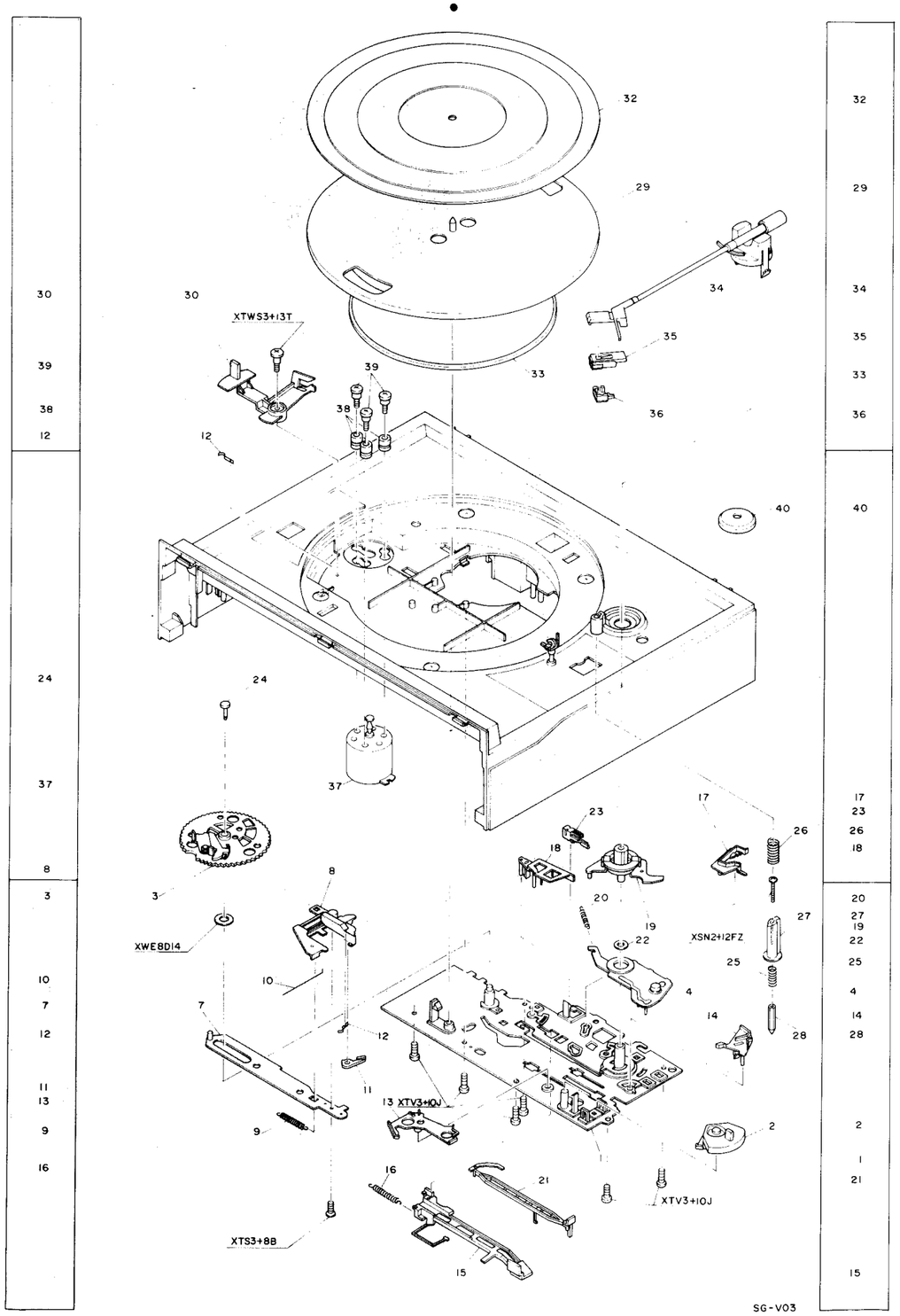
REPLACEMENT PARTS LIST OF CABINET AND CHASSIS

Ref. No.		Part No.	Description	Per Set (pcs.)
1		SYK1998	Cabinet Ass'y	1
2		SYU462-1	Bottom Board Ass'y (for UK, NPG(M))	1
2		SYU462-2	Bottom Board Ass'y	1
3		SYE920	Dust Cover Ass'y	1
4		SBH9112-7	Hinge	2
5		SYP684	Escutcheon Ass'y (for UK)	1
5		SYP684-1	Escutcheon Ass'y	1
6		SBN1002-2	Knob, Tuning	1
7		SBN1068	Knob, Selector	1
8		SBN1070	Knob, Volume	3
9		SYE958	Cassette Lid Ass'y	1
10		SMQ4094	Spring, Cassette Lid	1
11		SMQ3768	Counter	1
12		SBC472-2	Button Tape Select	1
13		SDT91302	Shaft, Tuning	1
14		SDD80-6	Dial Drum	1
15		RDS4170A	Spring, Dial Drum	1
16		SDA94	Holder, Dial Pointer	1
17		SMQ4098	Rec Operating Plate	1
18		SMQ4100	Rec Spoke	1
19	⚠	SHR134	Power Cord Clamp	1
20	⚠	SJA136	AC Power Cord (for UK)	1
20	⚠	SJA138	AC Power Cord	1
21		XCJ6P21E-1	Jack, H.P., Mic.	2
22		SJF4218-1	Terminal, Ant	1
23		SUS428	Spring, Start Button	1
24		SJY5198-1	Button, Start	1
25		SJY90078	Start Rod, Player	1
25		SJY90298	Start Rod, Player (for UK)	1
26		SBC492	Button, Power	1
27		SUH116	Remote Rod, Power	1
28	⚠	SUV254	Cover, Power	1
29		SGN6884	Name Plate	1
29		SGN6885	Name Plate (for UK, NPG(M))	1
30		SJF9424	Speaker Terminal	1
31	⚠	SJF110	Fuse Holder	4
32		SHG678	Rubber Sheet (for UK)	1
33	⚠	RUV387ZD	Cover, Voltage Select (for UK, NPG(M))	1

■ Items of Assembly Parts

Ref. No.	Par No.	Description	Per Set (pcs.)
1	SYK1998	**Cabinet Ass'y**	**1**
		Cabinet	(1)
		Felt, Foot	(2)
		Label, Stylus	(1)
		Arm Rest Ass'y	(1)
2	SYU462-1	**Bottom Board Ass'y**	**1**
	or	Bottom Board	(1)
	SYU462-2	Shield Paper	(1)
3	SYE920	**Dust Cover Ass'y**	**1**
		Dust Cover	(1)
		Badge	(1)
		Felt	(3)
5	SYP684	**Front Panel Ass'y**	**1**
	or	Front Panel	(1)
	SYP684-1	Tinted Glass A	(1)
		Tinted Glass B	(1)
		Felt, Foot	(2)
9	SYE958	**Cassete Lid Ass'y**	**1**
		Cassette Lid	(1)
		Tinted Glass	(1)
		Cushion	(2)
		Sheet, Guide	(1)

EXPLODED VIEW OF RECORD PLAYER



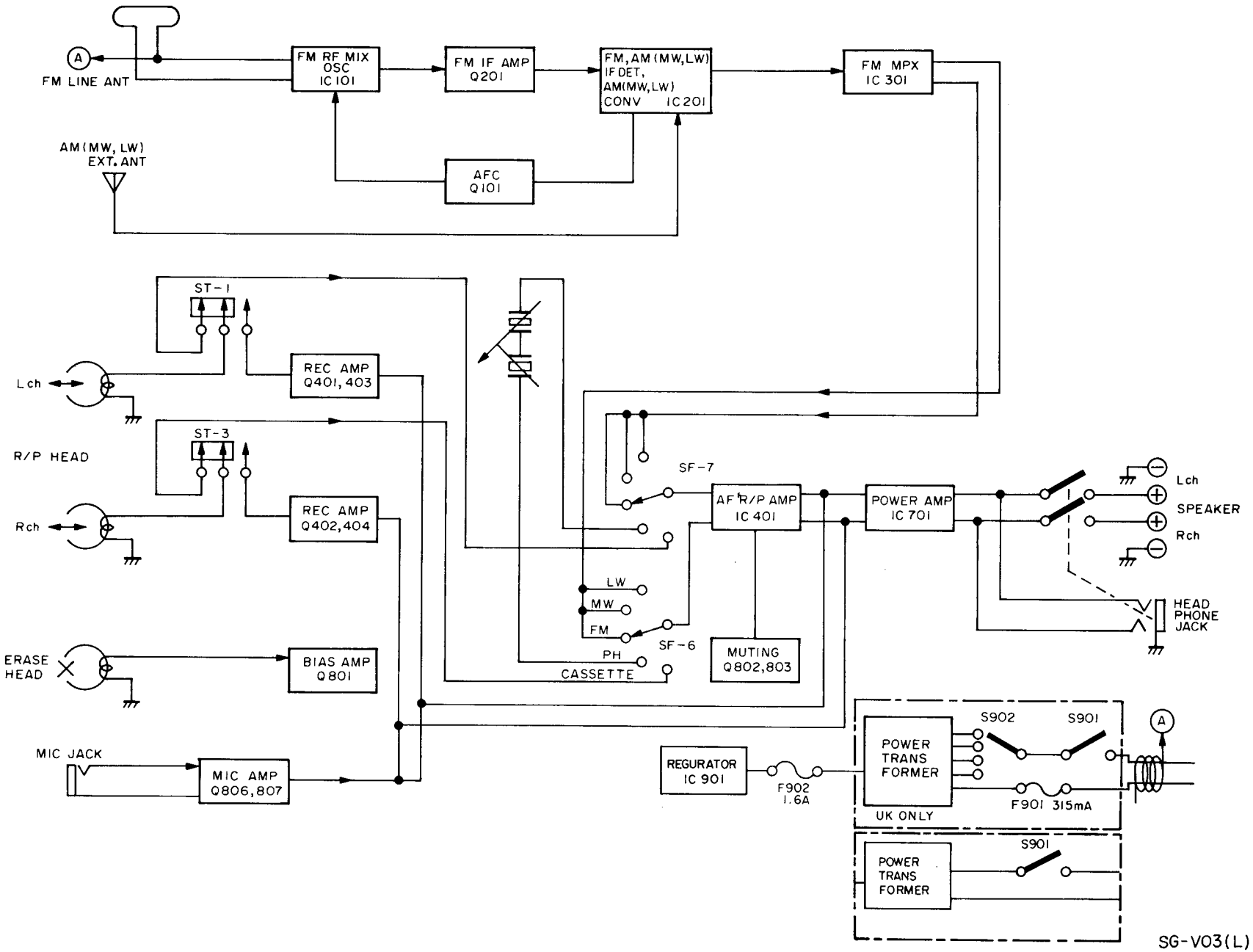
REPLACEMENT PARTS LIST OF RECORD PLAYER

Ref. No.	Part No.	Description	Per Set (pcs.)
1	SJY402	Base Plate Assembly	1
2	SJY90074	Lever, Record Size	1
3	SJY416	Main Gear Ass'y	1
4	SJY406	PU Moving Plate	1
7	SJY398	Operating Plate Ass'y	1
8	SJY90014-1	Bracket, Operating Plate	1
9	SJY90066-1	Spring A, Operating Plate	1
10	SJY90068-1	Spring B, Operating Plate	1
11	SJY90016	Operating Plate, Tone Arm	1
12	SJY90018	Spring Plate	2
13	SJY90020	Index Lever	1
14	SJY90022-1	Clamp Plate	1
15	SJY90224	Start Rod	1
16	SJY90302	Spring, Start Rod	1
17	SJY90026	Operating Plate A	1
18	SJY90028-4	Operating Plate B	1
19	SJY90030-1	Tone Arm Plate	1
20	SJY90072	Spring, Tone Arm Plate	1
21	SJY90032-1	Actuating Plate	1
22	SNW622-3	Washer	1
23	SSP66	Switch, Motor	1
24	SHR9174	Stopper Pin, Main Gear	1
25	SJY90160	Spring A, Lifter	1
26	SUS84-2	Spring B, Lifter	1
27	SJY5196-2	Lifter	1
28	SJY90034	Pin, Lifter	1
29	SJY400	Turntable Ass'y	1
30	SJY90076	Lever, Speed Select	1
32	SJY4054-1	Turntable Mat	1
33	SJY90080	Turntable Belt	1
34	EPA641STB	Tone Arm	1
35	EPC13STH	Cartridge with Stylus	1
36	EPS41ST	Stylus	1
37	MMIV03	Motor Ass'y	1
38	SHG9092	Rubber	3
39	SJY9168	Screw, Motor	3
40	SJY5018-1	EP Adapter	1

■ **Items of Assembly Parts**

Ref. No.	Part No.	Description	Per Set (pcs.)
1	**SJY402**	**Base Plate Assembly**	**1**
		Base Plate	(1)
		Bracket, Turntable Shaft	(1)
3	**SJY416**	**Main Gear Ass'y**	**1**
		Main Gear	(1)
		Actuating Link	(1)
		Friction Link	(1)
		Push Nut	(1)
7	**SJY398**	**Operating Plate Ass'y**	**1**
		Operating Plate	(1)
		Operating Pin	(1)
29	**SJY400**	**Turntable Ass'y**	**1**
		Turntable	(1)
		Shaft, Turntable	(1)
		Gear	(1)
37	**MMIV03**	**Motor Ass'y**	**1**
		Motor	(1)
		Motor Pulley	(1)

BLOCK DIAGRAM



20

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82078290 S/B

ORDER NO. TSD8211025C2

Service Manual

Stereo Music System

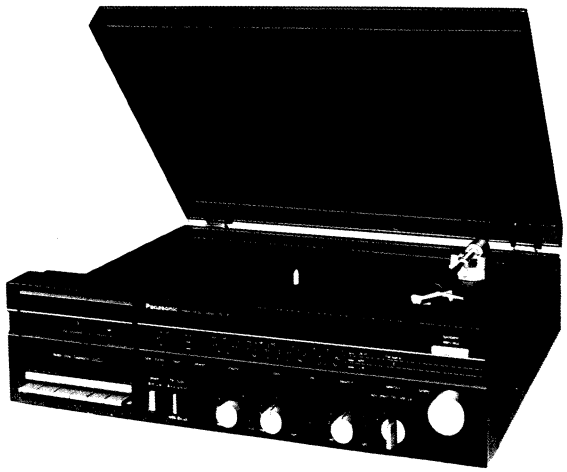
SG-V03

for W.Germany

(K)

(K) : Black Type

FM/MW/LW/FM STEREO RADIO WITH
CASSETTE TAPE DECK AND RECORD PLAYER



Please use this manual together with the service manual for Model No. SG-V03(L) Order No. TSD8207007C2

■ **SPECIFICATIONS**

AM TUNER SECTION

	SG-V03 (L)		SG-V03 for W. Germany (K)
Intermediate Frequency (IF)	455 kHz 470 kHz (United Kingdom)	➡	455 kHz
Power Supply	AC 220V, or AC 110V/120V/220V/240V,	➡	AC 220V, 50/60 Hz

■ **REPLACEMENT PARTS LIST**

Page	Ref. No.	Difference of Parts No. SG-V03 (L) ➡ SG-V03 for W. Germany (K)		Descriptions	Per Set (p.c.s.)	Remarks
	TRANSISTOR					
	Q201	2SC829-B	**2SC829-C**	FM IF AMP	1	Changed
	FUSE					
	F901 ⚠	XBAS2C03T1A	.....	.....	0	Deleted
	COILS AND TRANSFORMERS					
	L104	SL04N30-M	**SL04N30-M1**	Ant Coil, FM	1	Changed
	L106		**RLQY10G5-0**	Choke Coil	1	Added
11	T1 ⚠	SLT5V40-W	.....	.....	0	Deleted
	⚠	SLT5V42-W	**SLT5V42-W**	Power Transformer	1	Unchanged
	CF201	SVF107MA53	**SVF107MA53A**	FM C.F.T.	1	Changed
	SF202	SLI9B902-Q	**QCRZZ455A7W**	AM C.F.T.	1	Changed
	NL201	SAG20P152FH	.....	.....	0	Deleted
	SWITCHES					
	S902 ⚠	ESE3742	.....	.....	0	Deleted
	PACKING					
	PA4	SQX50500	**SQX50556**	Instruction Book	1	Changed
	PA5	SPN5152	.....	.....	0	Deleted
	PA6	SPN5164	.....	.....	0	Deleted

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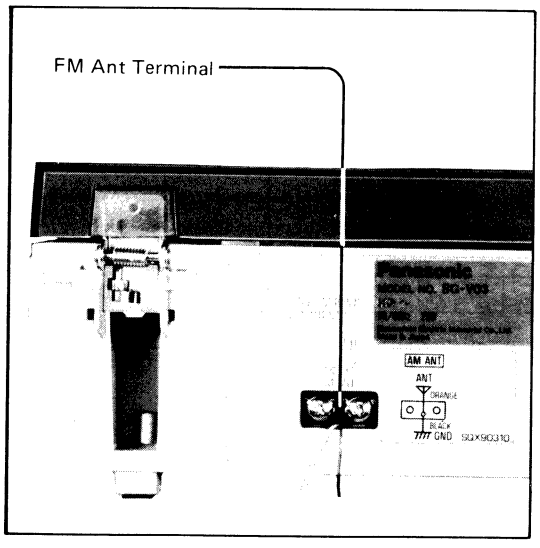
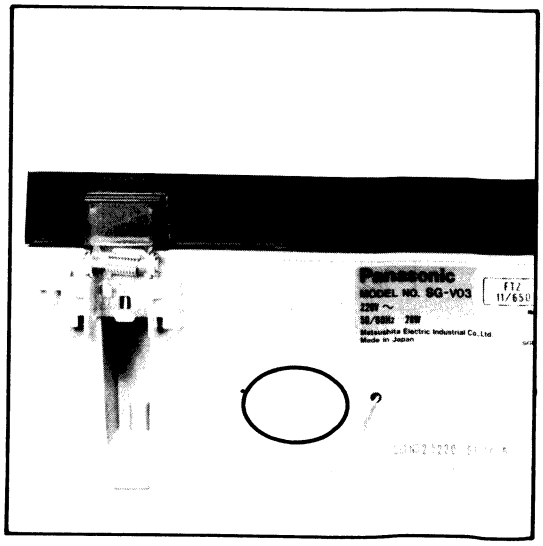
Page	Ref. No.	Difference of Parts No. SG-V03 (L) ➡ SG-V03 for W. Germany (K)		Descriptions	Per Set (p.c.s.)	Remarks
12	**RESISTORS**					
	R109	ERD25FJ560	**ERD25FJ220**	22 1/4W	1	Changed
13	**CAPACITORS**					
	C111	ECCDIH150K	**ECCDIH180JT**	18PF 50V	1	Changed
	C112	ECCDIH070D	**ECCDIH040CC**	4PF 50V	1	Changed
	C117	ECCDIH050D	.....	.....	0	Deleted
	C120	.....	**ECCDIH680K**	68PF 50V	1	Added
	C220	ECCDIH470K	**ECCDIH470JU**	47PF 50V	1	Changed
	C231	.....	**ECCDIH470DU**	47PF 50V	1	Added
17	**CABINET AND CHASSIS**					
	1.	SYK1998	**SYK2056**	Cabinet Ass'y	1	Changed
	2.	SYU462-1	.....	.....	0	Deleted
		SYU462-2	**SYU462-2**	Bottom Board Ass'y	1	Unchanged
	5.	SYP684	**SYP714**	Escutcheon Ass'y	1	Changed
		SYP684-1	.....	.....	0	Deleted
	9.	SYE958	**SYE1052**	Cassette Lid Ass'y	1	Changed
	20. ⚠	SJA136	**SJA138-3**	AC Power Cord	1	Changed
	⚠	SJA138	.....	.....	0	Deleted
	22.	SJF4218-1	.....	.....	0	Deleted
	24.	SJY5198-1	**SJY518**	Button, Start	1	Changed
	25.	SJY90078	**SJY90078**	Start Rod, Player	1	Unchanged
		SJY90298	.....	.....	0	Deleted
	29.	SGN6884	**SGN6884**	Name Plate	1	Unchanged
		SGN6885	.....	.....	0	Deleted
	31. ⚠	SJF110	**SJF110**	Fuse Holder	2	Changed Qt'y
	32.	SHG678	.....	.....	0	Deleted
	33. ⚠	RUV3872ZD	.....	.....	0	Deleted
	Items of Assembly Parts					
	1.	SYK1998	**SYK2056**	Cabinet Ass'y	1	Changed
	2.	SYU462-1	.....	.....	0	Deleted
		or				
		SYU462-2	**SYU462-2**	Bottom Board Ass'y	1	Unchanged
	5.	SYP684	**SYP714**	Escutcheon Ass'y	1	Changed
		or				
		SYP684-1	.....	.....	0	Deleted
	9.	SYE958	**SYE1052**	Cassette Lid Ass'y	1	Changed
19	**RECORD PLAYER**					
	2.	SYJ90074	**SYU90074-2**	Lever, Record Size	1	Changed
	30.	SJY90076	**SJY90076-2**	Lever, Speed Select	1	Changed

■ LOCATION OF CONTROLS (Page 2)

SG-V03 (L)



SG-V03 for W. Germany (K)



■ **ALIGNMENT INSTRUCTIONS-1 (Page 4)**

SG-V03 (L)

FM-RF ALIGNMENT

1	Connect to EXT. FM antenna terminal through Dummy antenna (75 Ω)	87.0 MHz 30% Mod. with 400 Hz	87.0 MHz
2		108.5 MHz 30% Mod. with 400 Hz	108.5 MHz

Notes: 1. As three output readings will be present, adjustmen
2. To correct the drift of FM band coverage (87.5 or

SG-V03 for W. Germany (K)

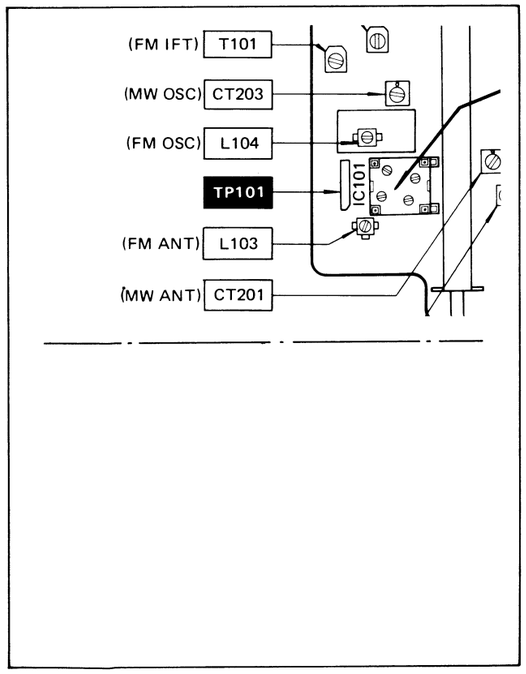
FM-RF ALIGNMENT

1	Connect to TP102 and TP103 (ground) through Dummy antenna (75 Ω)	87.39 MHz 30% Mod. with 400 Hz	87.39 MHz
2		108.25 MHz 30% Mod. with 400 Hz	108.25 MHz

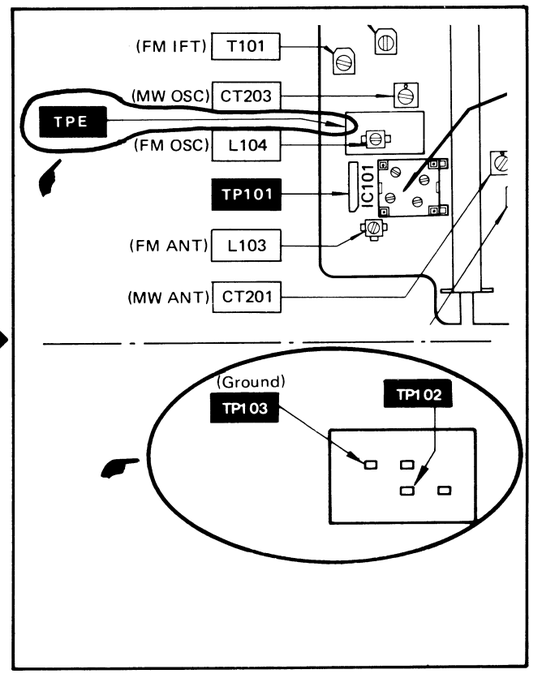
Notes: 1. As three output readings will be present, adjustmen
2. To correct the drift of FM band coverage (87.5 or

■ **TEST POINT (Page 5)**

SG-V03 (L)

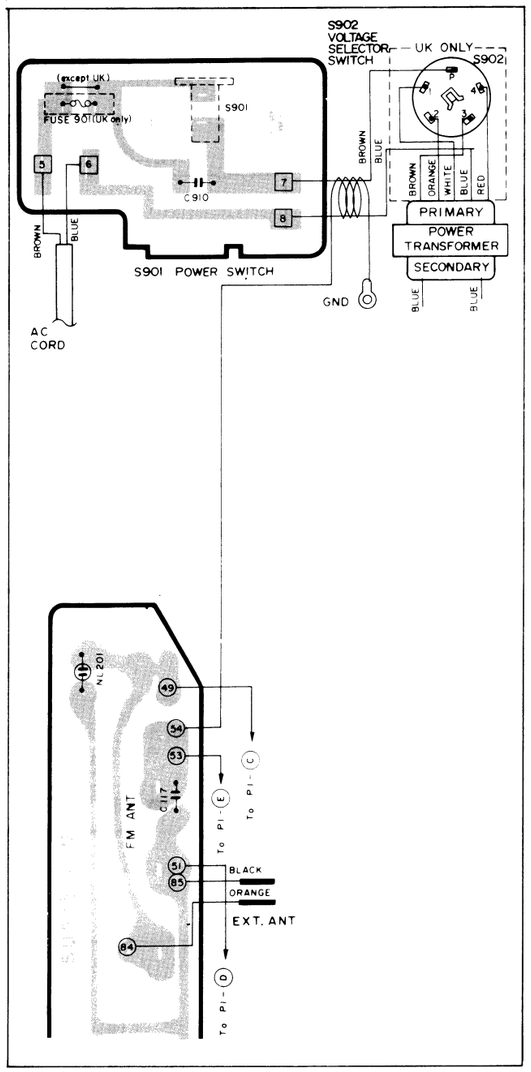


SG-V03 for W. Germany (K)



■ **CIRCUIT BOARD AND WIRING CONNECTION (Page 9)**

SG-V03 (L)



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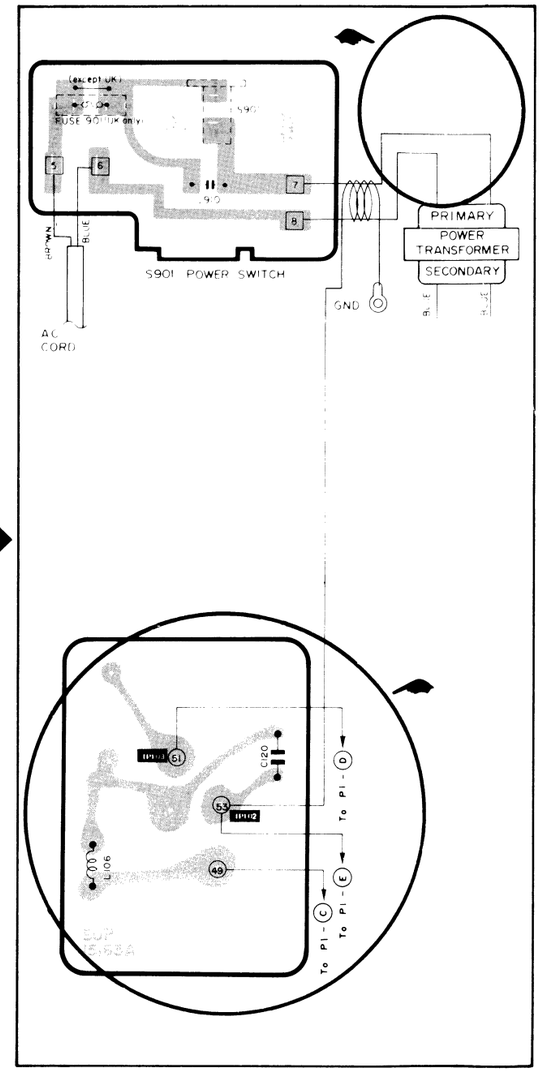

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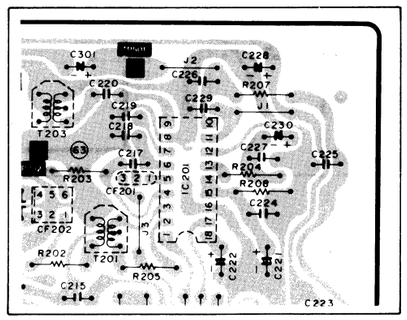
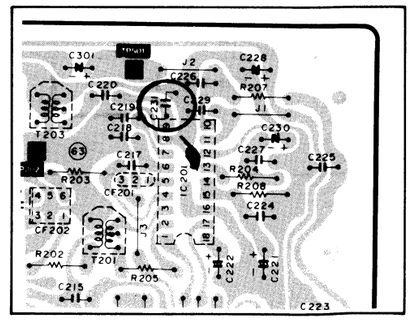
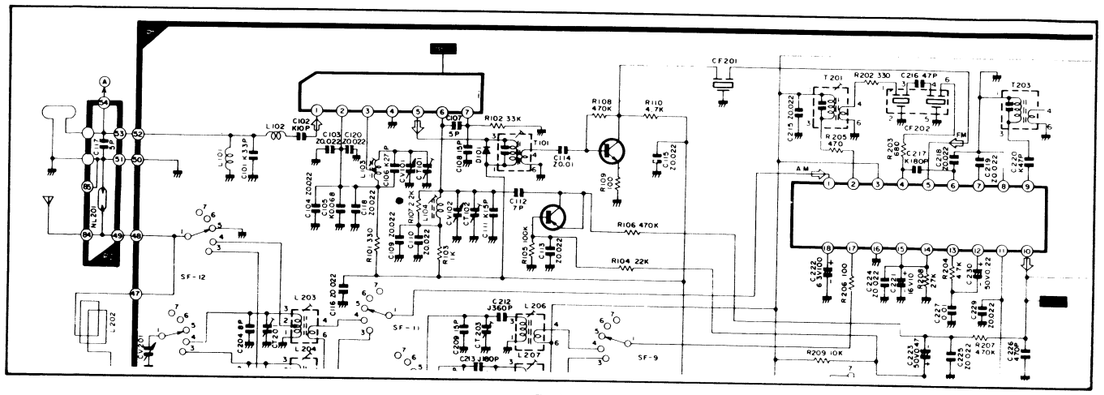


SG-V03 for W. Germany (K)



■ SCHEMATIC DIAGRAM (Page 10)

SG-V03 (L)



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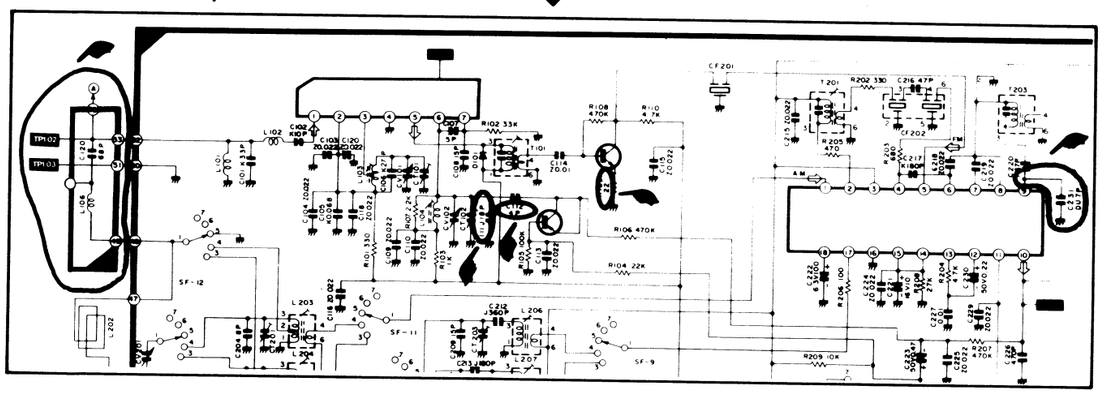

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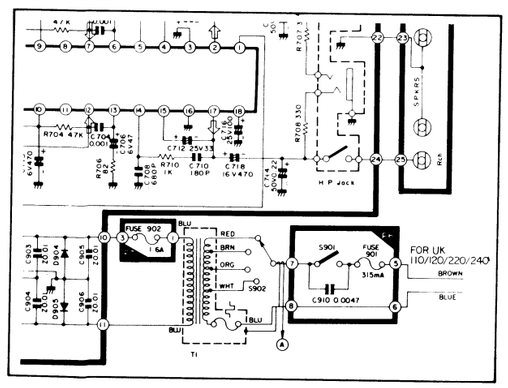
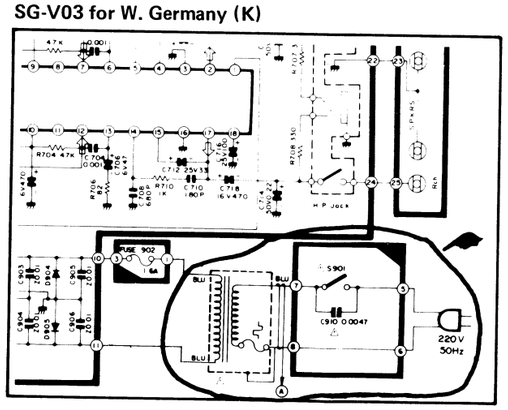
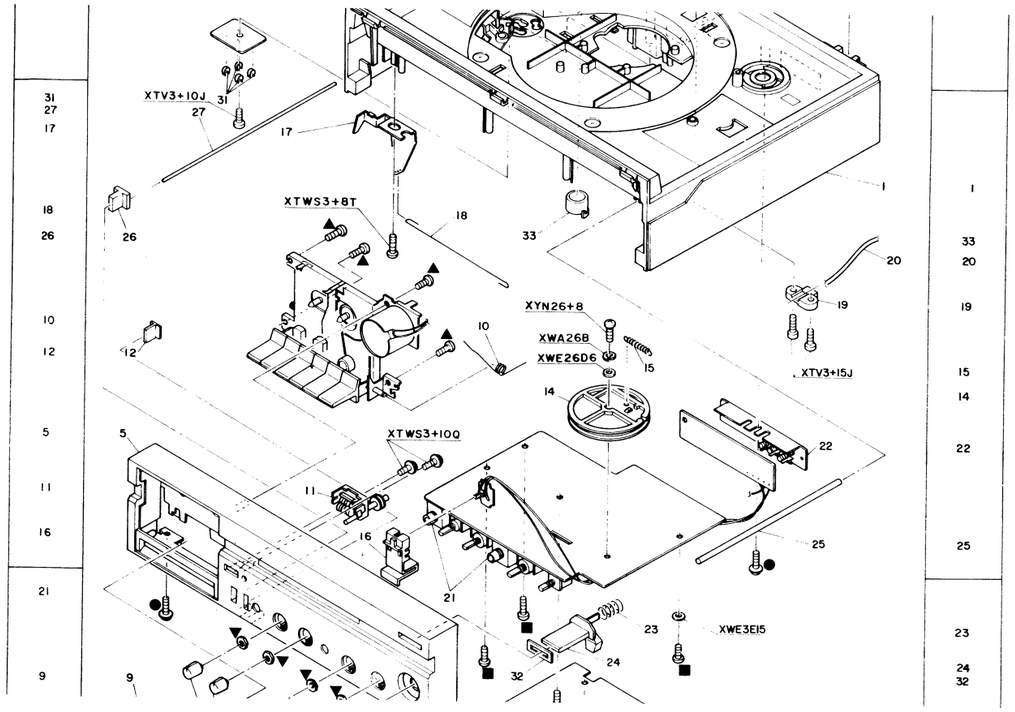


SG-V03 for W. Germany (K)

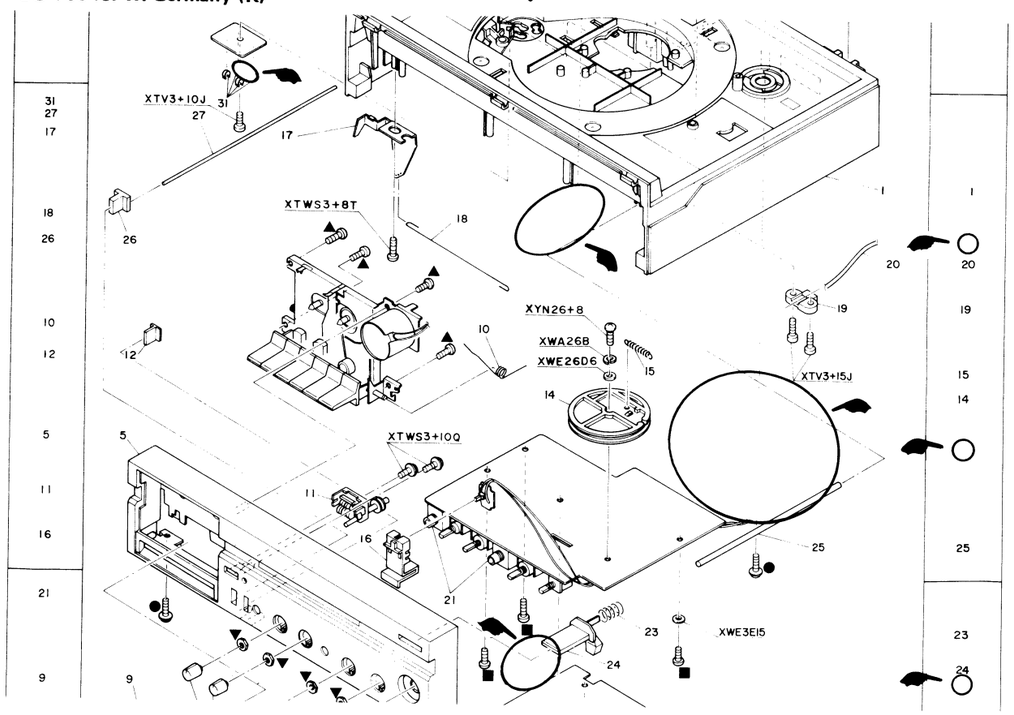


■ PARTS LOCATION OF CABINET AND CHASSIS (Page 14)

SG–V03 (L)



SG-V03 for W. Germany (K)



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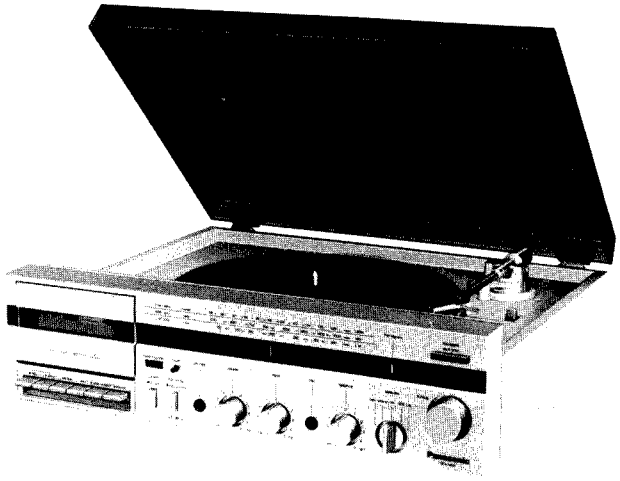
Service Manual

Stereo Music System

SG-V03

for W. Germany

FM/MW/LW/FM STEREO RADIO WITH
CASSETTE TAPE DECK AND RECORD PLAYER



Please use this manual together with the service manual for Model No. SG-V03(L) Order No. TSD8207007C2

■ SPECIFICATIONS

	SG-V03(L)		SG-V03(L) for W. Germany
Power Supply	AC220V or AC110V/120V/220V/240V 50/60Hz	➡	AC220V 50/60Hz

■ REPLACEMENT PARTS LIST

Ref. No.	Difference of Parts No. SG-V03(L) ➡ SG-V03 for W. Germany		Descriptions	Per Set (p.c.s.)	Remarks
TRANSISTOR					
Q201	2SC829-B	**2SC829-C**	FM IF AMP	1	Changed
FUSE					
F901	XBAS2C03T1A	. . . . .	. . . . .	0	Deleted
SWITCH					
S902	ESE3742	. . . . .	. . . . .	0	Deleted
PACKING					
PA4	SQX50500	**SQX50534**	Inst Book	1	Changed
PA5	SPN5152	. . . . .	. . . . .	0	Deleted
PA6	SPN5164	. . . . .	. . . . .	0	Deleted
COILS AND TRANSFORMER					
L104	SL04N30-M	**SL04N30-M1**	ANT Coil, FM	1	Changed
L106	. . . . .	**RLQY10G5-0**	Choke Coil	1	Added
T1 ⚠	SLT5V40-W	**SLT5V42-W**	Power Transformer	1	Changed
CF201	SVF107MA53	**SVF107MA53A**	FM CFT	1	Changed
CF202	SLI9B902-Q	**QCRZZ455A7W**	AM C.F.T.	1	Changed
NL201	SAG20P152FH	. . . . .	. . . . .	0	Deleted
RESISTOR					
R109	ERD25FJ560	**ERD25FJ220**	22 1/4W	1	Changed

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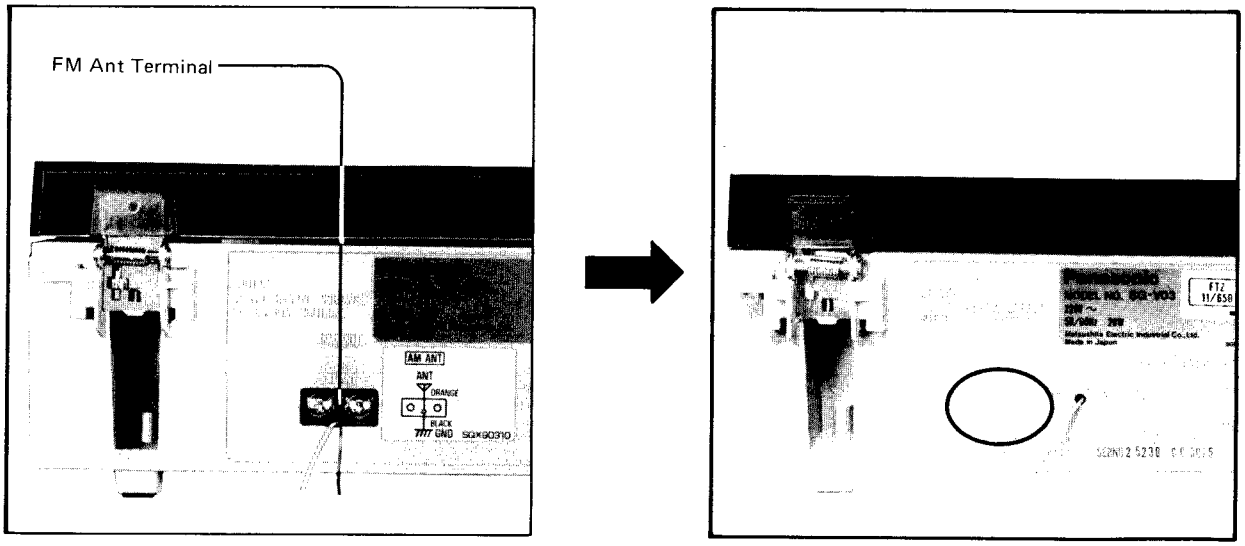
Ref. No.		Difference of Parts No. SG-V03 (L) ➡ SG-V03 for W. Germany		Descriptions		Per Set (p.c.s.)	Remarks
CAPACITORS							
C111		ECCD1H150K	**ECCD1H180JT**	18 pF	50V	1	Changed
C112		ECCD1H070D	**ECCD1H040CC**	4 pF	50V	1	Changed
C117		ECCD1H050D	. . . . .	. . . . .		0	Deleted
C120		. . . . .	**ECCD1H680K**	68 pF	50V	1	Added
C220		ECCD1H470K	**ECCD1H470JU**	47 pF	50V	1	Changed
C231		. . . . .	**ECCD1H470DU**	47 pF	50V	1	Added
CABINET AND CHASSIS							
1		SYK1998	**SYK1998-1**	Cabinet Ass'y		1	Changed
2		SYU462-1	**SYU462-2**	Bottom Cover		1	Changed
5		SYP684	**SYP684-2**	Escucheon Ass'y		1	Changed
20	⚠	SJA136	**SJA138**	AC Power Cord		1	Changed
22		SJF4218-1	. . . . .	. . . . .		0	Deleted
25		SJY90298	. . . . .	. . . . .		0	Deleted
29		SGN6884	. . . . .	. . . . .		0	Deleted
29		SGN6885	. . . . .	. . . . .		0	Deleted
32		SHG678	. . . . .	. . . . .		0	Deleted
33	⚠	RUV387ZD	. . . . .	. . . . .		0	Deleted

■ LOCATION OF CONTROLS (Page 2)



■ ALIGNMENT INSTRUCTIONS-1 (Page 4)

FM-RF ALIGNMENT

1	Connect to EXT. FM antenna terminal through Dummy antenna (75 Ω)	87.0 MHz 30% Mod. with 400 Hz	87.0 MHz
2		108.5 MHz 30% Mod. with 400 Hz	108.5 MHz

Notes: 1. As three output readings will be present, adjustmen
2. To correct the drift of FM band coverage (87.5 or

for W. Germany

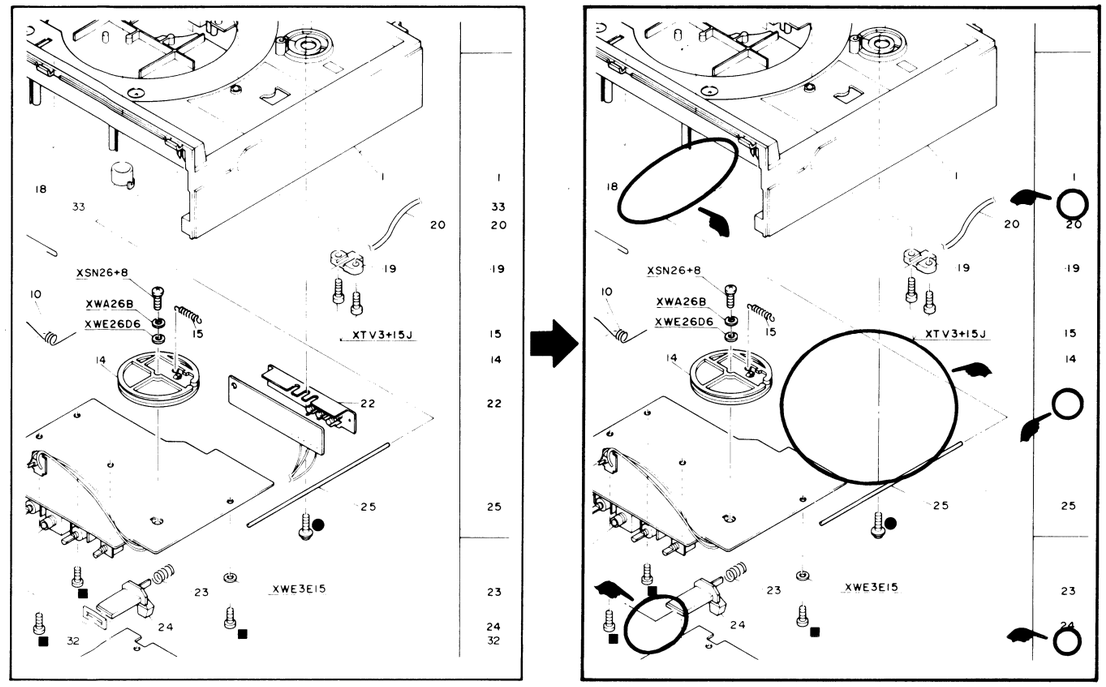
FM-RF ALIGNMENT

1	Connect to TP102 and TP103 (ground) through Dummy antenna (75 Ω)	87.39 MHz 30% Mod. with 400 Hz	87.39 MHz
2		108.25 MHz 30% Mod. with 400 Hz	108.25 MHz

Notes: 1. As three output readings will be present, adjustmen
2. To correct the drift of FM band coverage (87.5 or

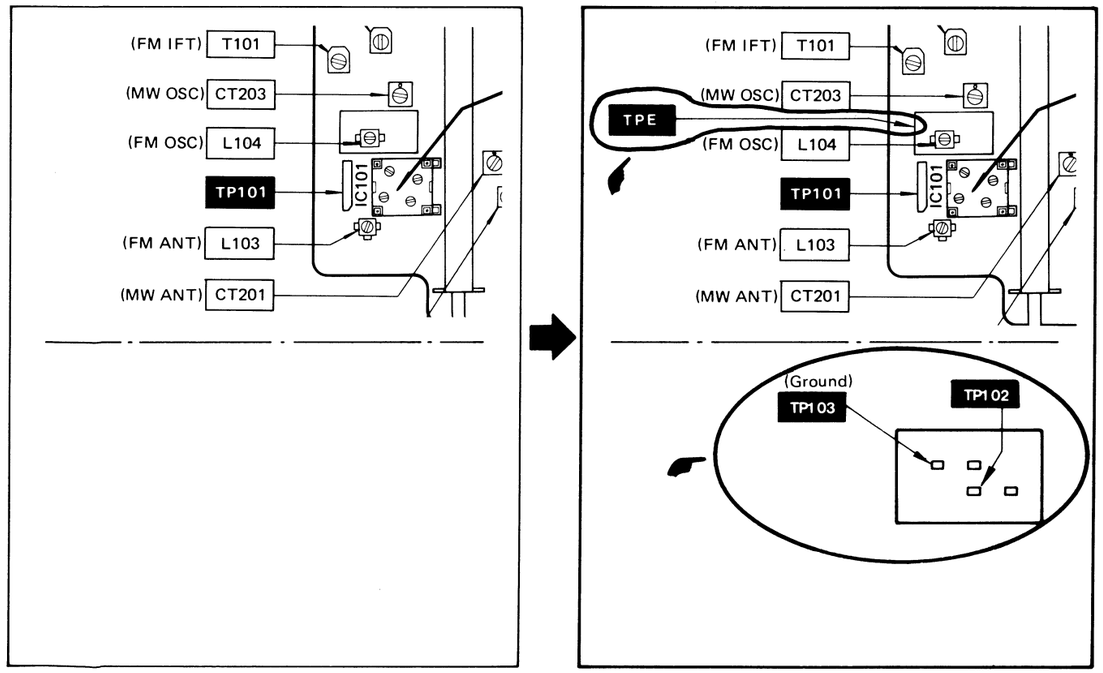
■ PARTS LOCATION OF CABINET AND CHASSIS (Page 14)

for W. Germany

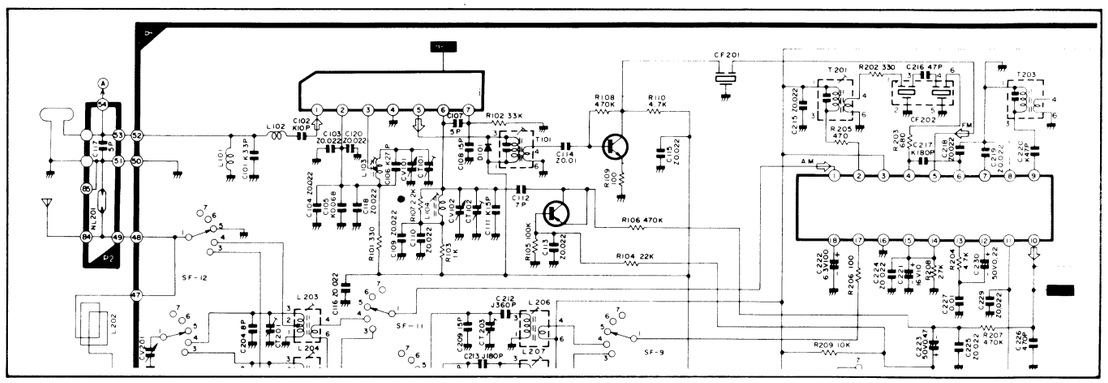


■ TEST POINT

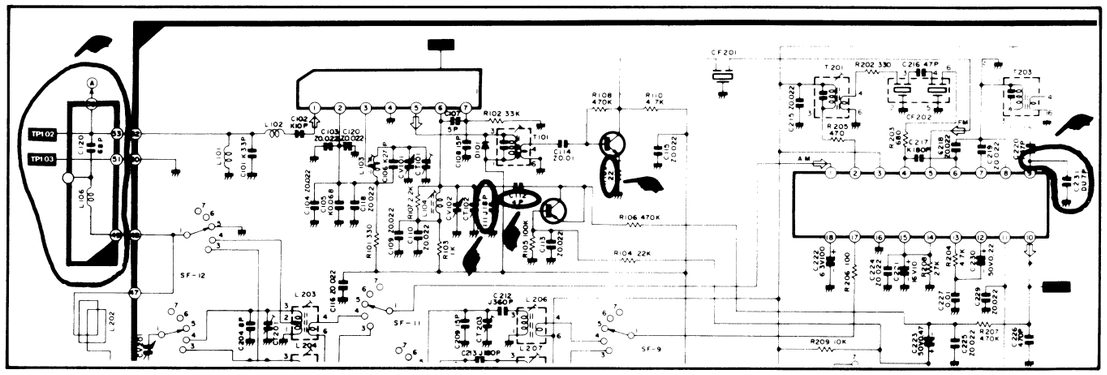
for W. Germany

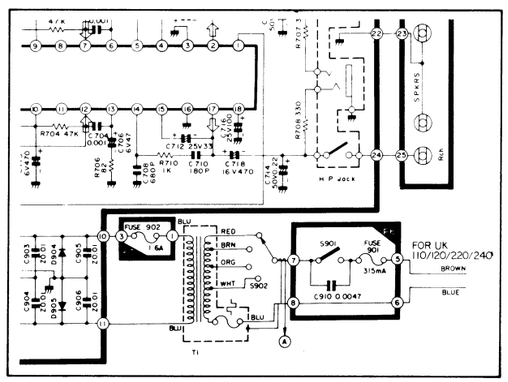


■ SCHEMATIC DIAGRAM (Page 10)

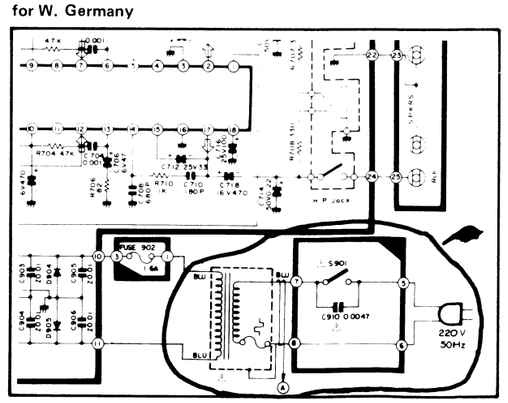


for W. Germany

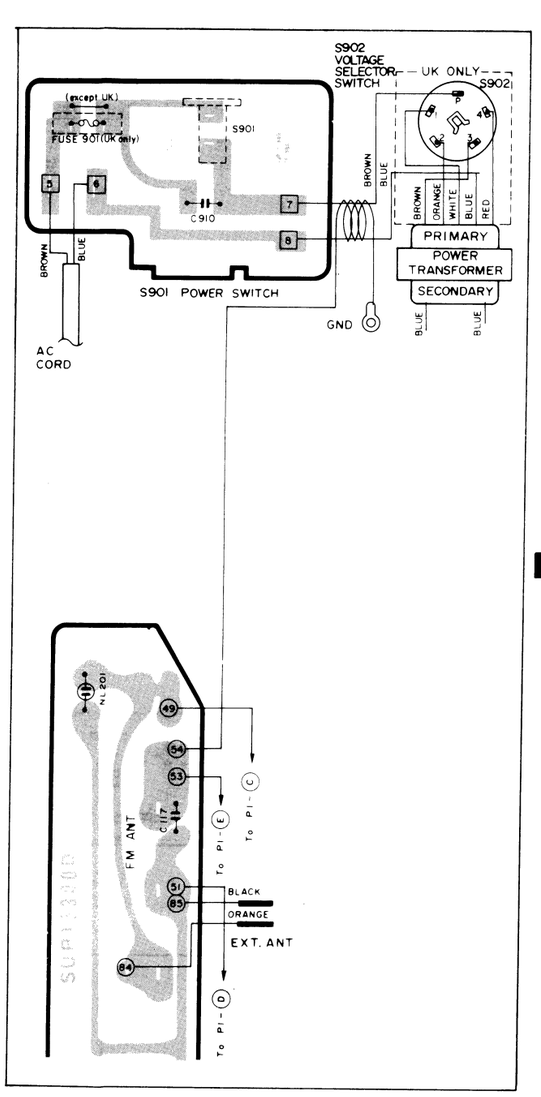




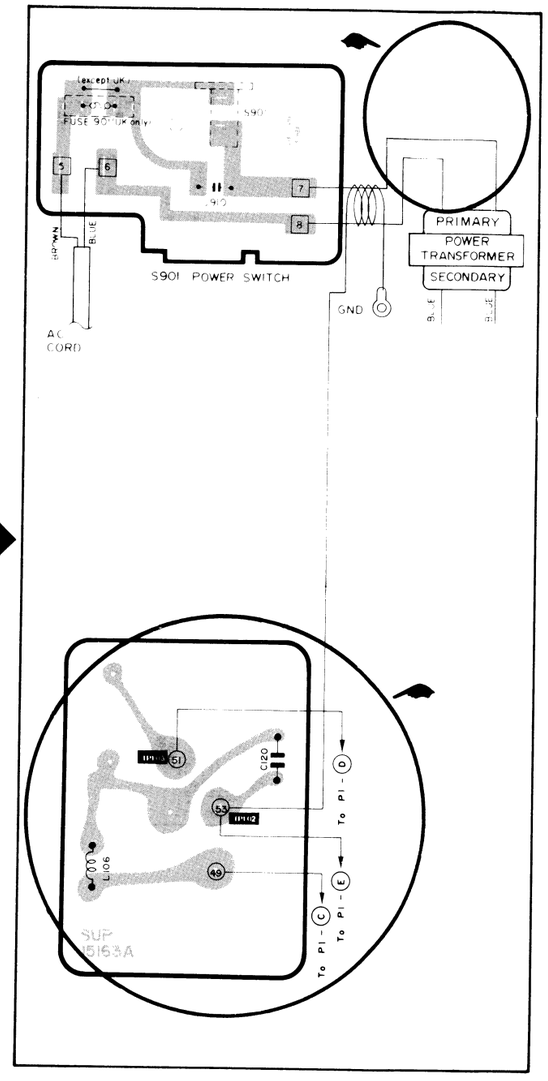
for W. Germany

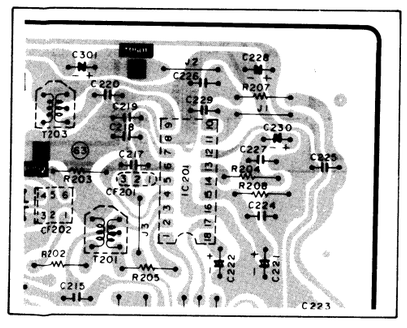


■ CIRCUIT BOARD AND WIRING CONNECTION (Page 9)

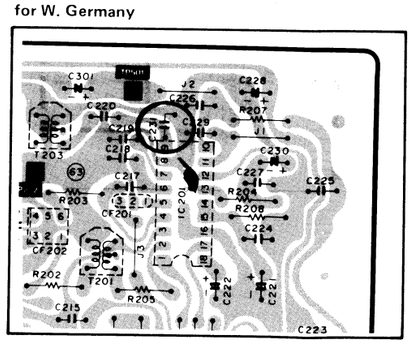


for W. Germany





for W. Germany



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ORDER NO.TSD8211020C2

Service Manual

Stereo Music System

FM/AM/FM STEREO RADIO WITH CASSETTE TAPE DECK AND RECORD PLAYER

SG-V03

(EK)

(EK): Black Type

Please use this manual together with the Service Manual for Model No. SG-V03(E) Order No. TSD8206005C2

■ REPLACEMENT PARTS LIST (PAGE 11, 17, 19)

Page	Ref. No.	Difference of part No. SG-V03 (E) ➡ SG-V03 (EK)		Description	Per set (p.c.s)
11	**PACKING**				
	PA4	SQX50480	SQX50554	Instruction Book	1
17	**CABINET AND CHASSIS**				
	1	SYK1998	SYK2050	Cabinet Ass'y	1
	5	SYP666	SYP710	Escutcheon Ass'y	1
	9	SYE958	SYE1052	Cassette Lid Ass'y	1
	24	SJY5198-1	SJY518	Button, Start	1
	29	SGN6881 SGN6882	SGN6881	Name Plate	1
19	**RECORD PLAYER**				
	2	SJY90074	SJY90074-2	Lever, Record Size	1
	8	SJY90014-1	SJY90014-2	Bracket, Operating	1
	12	SJY90018	SJY90018-1	Spring, Plate	2
	15	SJY90024-3	SJY90224	Start Rod	1
	16	SJY90070	SJY90302	Spring, Start Rod	1
	30	SJY90076	SJY90076-2	Lever, Speed Select	1
	34	EPA641STA	EPA641STB	Tone Arm	1
	Items of Assembly parts				
	3	SJY434	SJY416	Main Gear Ass'y	1
	31	SJY342	——	Arm Rest Ass'y	1

Panasonic

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